REVISIONARY TEST PAPER

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GROUP III

THE INSTITUTE OF
COST AND WORKS ACCOUNTANTS OF INDIA

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FINAL EXAMINATION

(REVISED SYLLABUS - 2008)

GROUP - III

Paper-11 : CAPITAL MARKET ANALYSIS & CORPORATE LAWS

Section I : Capital Market Analysis

Q. 1. (a) In each of the cases given below one out of four is correct. Indicate the correct answer and give your workings/reasons briefly.

(i) If the sale price of an open ended fund is Rs. 12.30 per unit and the fund is sold with a front end load of 5%, what is the NAV?

A. Rs. 10.00

B. Rs. 9.75

C. Rs. 11.70

D. Rs. 11.07

(ii) Nifty Index is currently quoting at 1329.78. Each lot is 250. Mr. A purchases a February contract at 1364. He has been asked to pay 10% initial margin. What is the amount of initial margin?

A. Rs. 34,100

B. Rs. 33,244

C. Rs. 136.40

D. Rs. 132.97

(iii) Cipla Ltd. announced a rights issue of four shares of Rs. 100 each at a premium of 160% for every five shares held by the existing shareholders. The market value of the shares at the time of rights issue is Rs. 395. The value of right is :

A. Rs. 90

B. Rs. 80

C. Rs. 60

D. Rs. 55

(iv) Petro Tech has issued some warrants that allow the holder to purchase, with one warrant, one equity share at Rs. 28.50. If the equity share is selling at Rs. 37.50, what would be the minimum price?

A. Rs. 28.50

B. Rs. 33.00

C. Rs. 9.00

D. Rs. 15.00

(v) If the share price of AB Ltd. (F.V. Rs. 10) quotes Rs. 920 on NSE, and the 3 months futures price quotes at Rs. 950, and the borrowing rate is given as 8% and the expected annual dividend yield is 15% p.a. payable before expiry, then the price of 3 months AB Ltd. futures would be :

A. Rs. 948.80

B. Rs. 939.90

C. Rs. 936.90

D. Rs. 928.40

(vi) An investor has Rs. 5,00,000 to invest. What will be his expected risk premium in investing in equity versus risk-free securities in the following conditions :

Investment	Probability	Expected return
Equity	0.6	Rs. 2,00,000
	0.4	(-) Rs. 1,50,000
Risk-free security	1.0	Rs. 25,000

A. Rs. 35,000

B. Rs. 45,000

C. Rs. 60,000

D. Rs. 85,000

(vii) A New York bank wants to fund their account called 'Vostro A/c', with an Indian bank by Rs. 10 million. What dollar amount the New York bank would deposit in the Indian bank's account called 'Nostro A/c', maintained in New York when inter bank rate is US$ 1 = Rs. 44.50 – 70?

A. US$ 2,23,713.64

B. US$ 2,24,216.37

C. US$ 2,24,719.10

D. US$ 2,23,965.00

(viii) Citi Bank wants to calculate Rupee TT selling rate of exchange for DM since a deposit of DM 1,00,000 in a FNCR A/c. has matured, when :

EURO 1	=	DM 1.95583 (locked in rate)
EURO 1	=	US$ 1.02348/43
US$ 1	=	Rs. 40.51/53

What would be the Rupee TT Selling rate for DM currency that the bank can consider for the said a/c.?

A. Rs. 25.3851

B. Rs. 21.1988

C. Rs. 21.2082

D. None of the above

(ix) A company issue commercial paper for Rs. 3 crore with a maturity period of 90 days. The interest rate is 11% p.a. The net amount received by the company will be :

A. 2.94 crore

B. 2.92 crore

C. 2.85 crore

D. None of the above

(x) MS Ltd. has a debt-equity mix of 30/70. If MS Ltd.'s debt Beta is 0.30 and Beta for its activity (or project) is 1.21, what is the Beta for its Equity?

A. 1.65

B. 1.60

C. 1.52

D. None of the baove

Q. 1. (b) Choose the most appropriate one from the stated options and write it down. (only indicate A, B, C, D as you think correct) :

(i) Fair value of an option represents

A. Intrinsic value of the option

B. Time value of the option

C. Both (A) and (B)

D. None of the above.

(ii) Buying and selling call or put option with same strike price but different expiration dates is called —

A. Long hedge

B. Short hedge

C. Horizontal option spread

D. None of the above

(iii) A shareholder has received bonus shares in the proportion of 1:1. What is the stockholding in the company? (indicate the most appropriate alternative)

A. Stockholding remains the same

B. Stockholding has gone up with more shares available for trading

C. Stockholding has gone up

D. Stockholding remains the same with more shares available for trading.

(iv) It is quite common for banks to issue subordinated debt. The reasons are :

A. Fund raising

B. It is treated as quasi-equity

C. It does not increase debt-equity ratio

D. It is included in Tier II capital for the purpose of determining capital adequacy.

(v) In efficient market, the market price is an 'unbiased estimate' of the true value of the stocks (shares). This implies that :

A. The market price always equals the true value

B. The market value has no relation to the true value

C. Market make mistakes about true value, which can be exploited by investors

D. Market prices contain errors, but these being random cannot be exploited by investors.

(vi) A portfolio is not efficient if there is another portfolio within :

A. A higher expected return and lower standard deviation

B. A lower expected return and some standard deviation

C. The same expected return and higher standard deviation

D. None of the above

(vii) The aim of foreign exchange risk management is :

A. To maximize profits

B. To minimize losses

C. To know with certainty the quantum of future cashflows

D. To earn a minimum level of profit

(viii) Eurodollar deposit means :

A. Dollar deposit outside USA

B. Dollar deposit beyond the control monetary authority

C. Dollar deposit in the US and outside US

D. None of the above

(ix) In an arbitrage portfolio, the change in the proportions of different securities will add upto :

A. One

B. Zero

C. Less than one

D. Greater than one

(x) Which of the following do not issue securities in the primary market?

A. FIIs

B. State Goverments

C. Companies

D. None of the above

Answer 1. (a)

(i) C.

Sale Price = NAV (1 + Load%)

Therefore NAV = Sale Price / (1 + Load%) = 12.30/1.05 = Rs. 11.70 Approx.

(ii) A.

The closing price for the spot index was 1329.78. The rupee value of stocks is thus 250 × 1329.78 = Rs. 3,32,445.00

The closing futures price for the February contract was 1364.00, which has a rupee value of 1364 × 250 = Rs. 3,41,000.00 and therefore requires a margin of Rs. 34,100.

(iii) C.

$$\text{Value of right} = \frac{r\,(M - S)}{N + r}$$

Where, r = number of rights issued = 4
N = number of equity shares = 5
M = market price = Rs. 395
S = issue price of rights
= Rs. 100 + (Rs. 100 × 160%) = Rs. 200

Value of right $= \dfrac{4\,(395-260)}{5+4}$ = Rs. 60

(iv) C.

The minimum price should be the difference between the sale price and the exercise price, when the exercise ratio is 1.

= Rs. 37.50 - Rs. 28.50 = Rs. 9.00

(v) C.

Future price (F) = Spot + Cost of carry + Dividend
= 920 + (920 × 0.08 × 3/12) – (10 × 0.15)
= 920 + 18.40 – 1.50 = Rs. 936.90

(vi) A.

Expected premium = (0.6 × Rs. 2,00,000) + [0.4 × (-) Rs. 1,50,000] – Rs. 25,000
= Rs. 1,20,000 – Rs. 60,000 – Rs. 25,000 = Rs. 35,000

(vii) C.

The banker's quote for selling is :

= Rs. 1,00,00,000/ Rs. 44.50 = US$ 2,24,719.10

(viii) B.

This involves finding the cross rate of Rs./DM.

Rs./DM = Rs./$ × $ / Euro × Euro/DM

The DM need to be sold ; hence we need to final the rate of the quote Rs./DM

[Rs./DM]Bid = [Rs./$] Bid x [$/Euro] Bid x [Euro/DM] Bid
= (Rs. 40.51 x 1.02348)/ 1.95583
= Rs. 21.1988

(ix) B.

11% p.a. interest for 90 days on Re 1.

= 0.11 × 90/365 = 0.0271232

Amount after 90 days : 1.0271232

Net amount received $= \dfrac{\text{Rs. } 3{,}00{,}00{,}000}{1.2071232}$ = 2,92,07,791 i.e. Rs. 2.92 crore

(x) B.

$\beta_A = \beta_d\,(D/V) + \beta_e\,(E/V)$

or, $1.21 = 0.30\,(0.3) + \beta_e \times 0.7$
$= 0.09 + 0.7\,\beta_e$

Or, $\beta_e = (1.21 - 0.09)/0.7 = 1.12/0.7 = 1.60$

Answer 1. (b)

(i) - C
(ii) - C
(iii) - D
(iv) - D
(v) - D
(vi) - A
(vii) - C
(viii) - B
(ix) - B
(x) - A

Q. 2. (a) What are the various risks associated with derivatives?

(b) What is difference between Primary market and Secondary market?

(c) Given the following risky portfolios

	A	*B*	*C*	*D*	*E*	*F*	*G*	*H*
Return %	**10**	**12.5**	**15**	**16**	**17**	**18**	**18**	**20**
σ %	**23**	**21**	**25**	**29**	**29**	**32**	**35**	**45**

(i) Which of these portfoloios are efficient? Which are inefficient?

(ii) Suppose one can tolerate a risk of 25%, what is the maximum return one can achieve if no borrowing or lending is resorted to?

(iii) Suppose one can tolerate a risk of 25%, what is the maximum return one can achieve if borrowing or lending at the rate of 12% is resorted to?

Answer 2. (a)

Various risks associated with derivatives are as follows :

(i) **Market Risk** – Price sensitivity to fluctuations in interest rates and foreign exchange rates.

(ii) **Liquidity Risk** – Most derivatives are customized instruments, hence may exhibit substantial liquidity risk.

(iii) **Credit Risk** – Derivatives not traded on exchange are traded in the Over the Counter (OTC) markets. OTC contracts are subject to counter party defaults.

(iv) **Hedging Risk** – Derivatives are used as hedges to reduce specific risks. If the anticipated risks do not develop, the hedge may limit the funds total return.

(v) **Regulatory Risk** – Owing to the high risk characteristics inherent in the derivatives market, the regulatory controls is sometimes too oppressive for market participants.

Answer 2. (b)

Primary Market vs. Secondary Market :

In the primary market, securities are offered to public for subscription for the purpose of raising capital or fund. Secondary market is an equity trading avenue in which already existing/pre- issued securities are traded amongst investors. Secondary market could be either auction or dealer market. While stock exchange is the part of an auction market, Over-the-Counter (OTC) is a part of the dealer market.

The SEBI is the regulatory authority established under Section 3 of SEBI Act 1992 to protect the interests of the investors in securities and to promote the development of, and to regulate, the securities market and for matters connected therewith and incidental thereto.

Answer 2. (c)

(a) Using the risk-return tradeoff, an investor would prefer B to A (B gives higher return for lower risk, hence dominant); would prefer C; would prefer E to D (E gives higher return for lower risk and hence dominant); would prefer F to G (F is dominant because it offers 18% at lower risk); and H; Hence portfolios B, C, E, F & H are efficient. Portfolios A, D & G are inefficient.

(b) As seen from the table, if the maximum risk of 25% can be tolerated, then Portfolio C can be chosen to give a maximum return of 15%.

(c) However, if borrowing/lending can be resorted @12%, then one can borrow in such a manner that the total risk does not exceed 25%. As we know higher returns can be obtained by borrowing at the risk free rate and investing in a risky portfolio. Obviously risk too would increase. Now we need to find that portion of investment in risky portfolio, which will give us maximum return for a risk not greater then 25%. Therefore let us assume weight of investment in risky portfolio be 'x'. Therefore (1-x) would be the weight in risk free asset. It is clear that since σ of risk free asset is zero, we need to find just that proportion in risky security to get 25%.

Thus we have for Portfolio A investment in proportion of 25/23 and -2/23 in risk free instrument (including borrowing) to arrive at a total risk of 25%. We simply used the below formula. [Note substitute σ of Risk free portfolio = 0]

x $\times$ σ of Risky Portfolio + (1-x) $\times$ σ of Risk free portfolio = 25%

'x' found above, would be used it to find total return.

Total return = x $\times$ Return of Risky Portfolio + (1-x) $\times$ 12

Thus we get the table given below.

	A	B	C	D	E	F	G	H
Proportion in risky security	25/23	25/21	25/25	25/29	25/29	25/32	25/35	25/45
To get Risk	25	25	25	25	25	25	25	25
Return	9.83	12.60	15.00	15.45	16.31	16.69	16.29	16.44

We see from the table that a maximum return of 16.69% is obtained for portfolio F, when we invest in a proportion of 25/32 in portfolio F & balance 7/32 in risk free asset.

Q. 3. (a) Write short note on Chaos Theory.

(b) What are the drawbacks of Mutual Funds?

(c) Ram holds a diversified equity portfolio of Rs. 150 Crores with beta 1.5. Shyam holds his entire money in stock X of same value with a beta of 0.9. Both are planning to hedge their holdings using futures. The following futures are available :

(i) Nifty Index Futures @ 4550 (Each lot = 50 units)

(ii) Futures of stock X @ 1520 (Each lot = 100 units)

How Ram & Shyam would perfectly hedge their portfolios using the above futures? Examine all possible options and find the number of contracts required to hedge, gain or loss overall on hedging if it is expected that markets would fall by 10% from the current level. Today spot Nifty is at 4500 and stock X is quoting at Rs. 1500.

Answer 3. (a)

At recent finance conferences, a few researchers have presented papers on chaos theory and its application to the stock market. In physics, chaos theory is growing field of study examining instances in which apparently random behaviour is, in fact, quite systematic or even deterministic. Scientists apply this theory to weather prediction, population growth estimates, and fisheries biology.

- As an example of the latter application, a given volume of ocean water, left free from human interference, will not necessarily reach an equilibrium population of the various species that inhibit it. As fish grow, they consume the smaller fry (of their own or a different species) in increasing numbers. Fewer younger fishes are left to mature; this, coupled with the natural death of the older fish, eventually results in a sudden drastic reduction in fish population, causing dismay to fishermen and excitement in the local media. At the same time, it results in reduced predation and food competition by the surviving fry, so the population begins to grow dramatically, and the cycle continues. Interactions between species add complexity to the process.
- Investment analysts have sought a pattern in stock market behavior since the origin of the exchanges. Much remains unknown about how security prices are determined, and chaos theory may eventually provide some potential answers. If the apparent randomness of security price changes, can be shown to be nonrandom, much of the theory of finance would need revision.

Answer 3. (b)

Mutual funds have their drawbacks and may not be for everyone :

- **No Guarantees :** No investment is risk free. If the entire stock market declines in value, the value of mutual fund shares will go down as well, no matter how balanced the portfolio. Investors encounter fewer risks when they invest in mutual funds than when they buy and sell stocks on their own. However, anyone who invests through a mutual fund runs the risk of losing money.
- **Fees and commissions :** All funds charge administrative fees to cover their day-to-day expenses. Some funds also charge sales commissions or “loads” to compensate brokers, financial consultants, or financial planners. Even if you don’t use a broker or other financial adviser, you will pay a sales commission if you buy shares in a Load Fund.
- **Taxes :** During a typical year, most actively managed mutual funds sell anywhere from 20 to 70 percent of the securities in their portfolios. If your fund makes a profit on its sales, you will pay taxes on the income you receive, even if you reinvest the money you made.
- **Management risk :** When you invest in a mutual fund, you depend on the fund’s manager to make the right decisions regarding the fund’s portfolio. If the manager does not perform as well as you had hoped, you might not make as much money on your investment as you expected. Of course, if you invest in Index Funds, you forego management risk, because these funds do not employ managers.

Answer 3. (c)

Ram can hedge his diversified equity holding using a diversified market index viz. Nifty. The basic concept in choosing the hedge instrument is the correlation between the asset and the hedge instrument. If the correlation is high then buying one and selling another would more or less offset all gains in one with losses in another and vice versa. Ram is holding a diversified portfolio and hence use would hedge using diversified market index viz. Nifty Index Futures. If the correlation is highly negative, then having both, i.e. buying the underlying and buying the hedge instrument would serve the hedge purpose. Using beta we can say that the stock X more or less behaves like market. Moreover, stock and stock futures are expected to have same beta, meaning high correlation. Hence Shyam can either use Nifty Index futures or stock futures to hedge his stock holdings.

Ram would sell Nifty futures equivalent to beta times value of his portfolio for perfect hedge i.e. he should sell 1.5 × 150 Crores = Rs. 225 Crores at 4550 levels i.e. 225 Crores / (4550 × 50) = 9890 contracts approximately.

With markets falling 10%, portfolio value will fall by 1.5 times 10% i.e. 15% i.e. 15% × 150 Crores or a loss of Rs. 22.5 Crores. Nifty futures which are sold worth Rs. 225 Crores would give Ram 10% (as futures are expected to fall by 10%, but Ram having sold futures would gain) i.e. Rs. 22.5 Crores, resulting in nil gain or loss.

Shyam may sell Nifty futures equivalent to beta times value of his portfolio for perfect hedge i.e. he should sell 0.9 × 150 Crores = Rs. 135 Crores at 4550 levels i.e. 135 Crores / (4550 × 50) = 5934 contracts approximately.

With markets falling 10%, stock value will fall by 0.9 times 10% i.e. 9% i.e. 9% x 150 Crores or a loss of Rs. 13.5 Crores. Nifty futures which are sold worth Rs. 135 Crores would give Shyam 10% (as futures are expected to fall by 10%, but Shyam having sold futures would gain) i.e. Rs. 13.5 Crores, resulting in nil gains.

Shyam may also sell stock X futures equivalent to value of his portfolio for perfect hedge i.e. he should sell 150 Crores at 4550 levels i.e. 150 Crores / (4550 × 50) = 6593 contracts approximately.

With markets falling 10%, stock value will fall by 0.9 times 10% i.e. 9% × 150 Crores or a loss of Rs. 13.5 Crores. Stock futures which are sold worth Rs. 150 Crores would give Shyam 9% (as stock futures are also expected to fall by 9%, but Shyam having sold futures would gain) i.e. Rs. 13.5 Crores, resulting in nil gains.

Q. 4. (a) Is the 'term structure' the only factor influencing the price of a bond?

(b) Write short note on Exchange Rate Risk.

(c) Capital Allocation and Optimal Portfolio

Assume two Portfolios, A and B, offering expected returns of 20% and 25% respectively. The correlation coefficient of the two portfolios is 0.40. The risks of A and B are given by standard deviations are 20% and 30% respectively. The risk-free asset offers a return of 8%. Find the following :

(i) In what ratio would you combine the Portfolios A and B so that you have the best possible capital allocation?

(ii) hat would be the risk and return of such portfolio?

(iii) If combined with the risk-free asset what trade-off of the risk and return would be made?

(iv) If capital allocation is done with Portfolio A or Portfolio B, do you expected to achieve the same trade off as with the portfolio obtained in (a)?

Answer 4. (a)

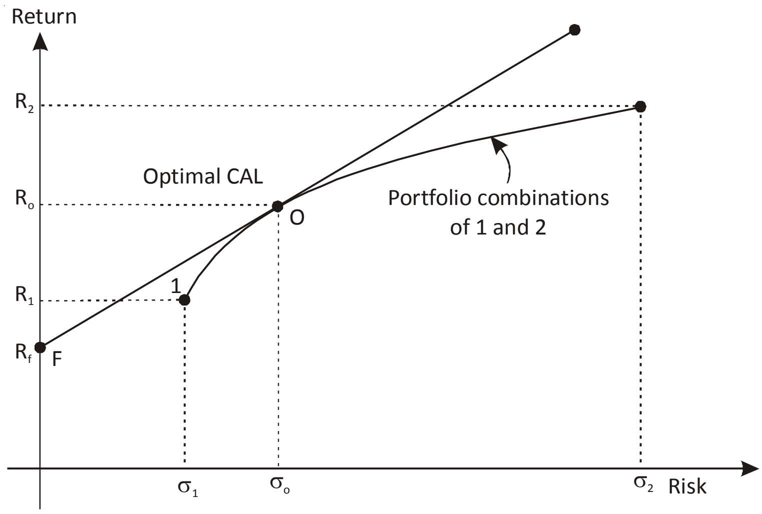
No, there are other factors besides the term structure, that influence the pricing of a bond. These include, for instance, tax regulations (differential tax rates for income and capital gains) that affect the relative valuations of bonds with different cash flows. Again, illiquid bonds trade at a premium relative to liquid bonds of the same residual maturity. Some other characteristics also influence bond valuation. For trades in the same bond conducted on the same day, dispersion in prices could be attributed to transaction costs that vary with the size of the trade, an example of which could be an intra-day effect on account of new developments during the day and expectations about the directionality of the term structure risk, higher is the spread.

Answer 4. (b)

All investors who invest internationally in today's increasingly global investment arena face the prospect of uncertainty in the returns after they convert the foreign gains back to their own currency. Unlike the past when most U.S. investors ignored international investing alternatives, investors today must recognize and understand exchange rate risk, which can be defined as the variability in returns on securities caused by currency fluctuations. Exchange rate risk is sometimes called currency risk. For example, a U.S. investor who buys a German stock denominated in marks must ultimately convert the returns from this stock back to dollars. If the exchange rate has moved against the investor, losses from these exchange rate movements can partially or totally negate the original return earned. Obviously, U.S. investors who invest only in U.S. stocks on U.S. markets do not face this risk, but in today's global environment where investors increasingly consider alternatives from other countries, this factor has become important. Currency risk affects international mutual funds, global mutual funds, closed-end single country funds, American Depository Receipts, foreign stocks, and foreign bonds.

Answer 4. (c)

(a) We have to find the optimal Portfolio O that is a combination of Portfolios A and B. The Portfolio O would be combined with the risk-free asset to yield the best portfolio.



Let proportion of money in Portfolio A be w_1 with $(1 - w_1)$ in Portfolio B. By changing w_1 we obtain various portfolios and the w_1* is the proportion that provides optimal portfolio. The proportion w_1* is given by –

$$w_1 = \frac{(R_1 - R_f)\sigma_2^2 - (R_2 - R_f)\rho\sigma_1\sigma_2}{(R_1 - R_f)\sigma_2^2 + (R_2 - R_f)\sigma_1^2 - (R_1 + R_2 + 2R_f)\rho\sigma_1\sigma_2}$$

$$w_1 = \frac{(20-8)\times 900 - (25-8)\times 0.4\times 20\times 30}{(20-8)\times 900 + (25-8)\times 400 - (20+25-16)\times 0.4\times 20\times 30}$$

$$= \frac{10800 - 4080}{10800 + 6800 - 6960} = \frac{6720}{10640} = 0.6316 \text{ or } 63.16\%$$

and w_2* = 1 – w_1* = 1 – 0.6316 = 0.3684 or 36.84%

The optimal portfolio that would yield a capital allocation line with maximum slope would be obtained if of the total amount allocated to risky portfolio, 63.16% is invested in Portfolio A and remaining 36.4% in Portfolio B.

(b) The return and risk of the optimal portfolio would be :

Optimal Portfolio Return, $R_0 = w_1R_1 + w_2R_2$

$= 0.6316 \times 20 + 0.3684 \times 25$

$= 12.63 + 9.21 = 21.84\%$

Optimal Portfolio Risk, $\sigma_o^2 = w_1^2\,\sigma_1^2 + w_2^2\,\sigma_2^2 + 2w_1w_2\rho\sigma_1\sigma_2$

$= 0.6316^2 \times 20^2 + 0.3684^2 \times 30^2$

$+ 0.6316 \times 0.3684 \times 0.4 \times 20 \times 30$

$= 159.57 + 122.15 + 55.84 = 337.57$

or $\sigma_o = 18.37\%$

(c) The slope of the capital allocation line formed with the optimal portfolio and the risk-free asset is :

$$\text{Slope of the CAL} = \frac{R_o - R_f}{\sigma_o} = \frac{21.84 - 8.00}{18.37} = \frac{13.84}{18.37} = 0.75$$

The slope of 0.75 of the CAL implies that for an increase in risk of 1%, the extra return that can be earned is 0.75%.

(d) If capital allocation is done with Portfolio A and the risk-free asset the benefit in return for same increase in the risk will be lesser as given by reduced slope of such CAL. The extra return for an increase of 1% in risk is 0.60%.

$$\text{Slope of the CAL with Portfolio A} = \frac{R_1 - R_f}{\sigma_1}$$

$$= \frac{20.00 - 8.00}{20.00} = \frac{12}{20} = 0.60$$

Similarly, the CAL using Portfolio B and the risk-free asset would be less than the CAL formed with the optimal portfolio O.

$$\text{Slope of the CAL with Portfolio B} = \frac{R_2 - R_f}{\sigma_2}$$

$$= \frac{25.00 - 8.00}{30.00} = \frac{17}{30} = 0.57$$

Q. 5. (a) What do you mean by Portfolio rebalancing?

(b) A group of analysis believes that the returns of the portfolios are governed by two vital factors— 1. the rate of economic growth and 2. the sensitivity of stock to the developments in the financial markets. The sensitivities of returns with respect to these two factors are denoted by β_1 and beta β_2 respectively.

Further these analysts believe that returns on three carefully crafted Portfolios A, B and C must be predominantly governed by these two factors alone leaving remaining to some company/ portfolio specific factors. Assume that these three Portfolios A, B, and C are found to have following beta co-efficients :

Portfolio	***Expected Return, %***	β_1	β_1
A	**16.00**	**1.00**	**0.80**
B	**25.00**	**1.50**	**1.30**
C	**32.00**	**2.00**	**1.50**

Find out the Arbitrage Pricing Theory (APT) equation governing the returns on the portfolios.

A **(c) Consider the data for a sample of 4 shares for two years, the base year and year *t* :**

Share	Price in base year (Rs.)	Price in year "t" (Rs.)	Number of outstanding shares (in million)
A	40	30	3
B	60	75	12
C	20	40	6
D	75	90	5

What is the price weighted index, equal weighted index, and value weighted index for year *t* ?

Answer 5. (a)

Portfolio rebalancing is the action of bringing a portfolio of investments that has deviated away from one's target **asset allocation** back into line. Under-weighted securities can be purchased with newly saved money; alternatively, over-weighted securities can be sold to purchase under-weighted securities. The investments in a portfolio will perform according to the market. As time goes on, a portfolio's current asset allocation can move away from an investor's original target asset allocation. If left un-adjusted, the portfolio could either become too risky, or too conservative. The goal of rebalancing is to move the current asset allocation back in line to the originally planned asset allocation.

Determining an effective rebalancing strategy is a function of the portfolio's assets: their expected returns, their volatility, and the correlation of their returns. For example, a high correlation among the returns of a portfolio's assets means that they tend to move together, which will tend to reduce the need for rebalancing. In addition, the investment time horizon affects the rebalancing strategy. A portfolio with a short time horizon is less likely to need rebalancing because there is less time for the portfolio to drift from the target asset allocation. In addition, such a portfolio is less likely to recover the trading costs of rebalancing.

Answer 5. (b)

Arbitrage Pricing Theory for two factors is

$$R_p = \lambda_0 + \lambda_1\beta_1 + \lambda_2\beta_2$$

Putting the given values in the APT to solve for three unknown variables :

For Portfolio A : $16 = \lambda_0 + \lambda_1 \times 1.00 + \lambda_2 \times 0.80$ (1)

For Portfolio B : $25 = \lambda_0 + \lambda_1 \times 1.50 + \lambda_2 \times 1.30$ (2)

For Portfolio C : $32 = \lambda_0 + \lambda_1 \times 2.00 + \lambda_2 \times 1.50$ (3)

Subtracting (1) from (2)

$$9 = \lambda_1 \times 0.50 - \lambda_2 \times 0.50 \quad (4)$$

Subtracting (1) from (3)

$$16 = \lambda_1 \times 1.00 + \lambda_2 \times 0.70 \qquad (5)$$

Multiplying (4) with 2, we get

$$18 = \lambda_1 \times 1.00 - \lambda_2 \times 1.00 \qquad (6)$$

Subtracting (5) from (6), we get

$$\lambda_2 = 20/3$$

Subtracting the value in (4)

$$9 = 10/3 + \lambda_1 \times 0.50$$

gives $\lambda_2 = 34/3$

Putting the values of λ_1 and λ_2 in (3) we get

$$32 = \lambda_0 + 2 \times 34/3 + 1.50 \times 20/3$$

and $\lambda_0 = -2/3$

APT would then be $R_p = -2/3 + 34/3 \times \beta_1 + 20/3 \times \beta_2$

Answer 5. (c)

Share	**Price in base year (Rs.) 1**	**Price in year *t* (Rs.) 2**	**Price relative (2/1 × 100) 3**	**No. of outstanding shares (in million) 4**	**Market capitalisation in the base year (1 × 4) 5**	**Market capitalisation in year *t* (2 × 4) 6**
A	40	30	75	3	120	90
B	60	75	125	12	720	900
C	20	40	200	6	120	240
D	75	90	120	5	375	450
	195	235	520		1335	1680

The price weighted index for year is $\frac{235}{195} \times 100 = 121$

The equal weighted index for year *t* is $\frac{520}{400} \times 100 = 130$

The value weighted index for year *t* is $\frac{1680}{1335} \times 100 = 126$

Q. 6. (a) What is Investor Protection Fund (IPF) at Stock Exchanges?

(b) VHP Company has sold Rs. 1000, 12% perpetual debentures 10 years ago. Interest rates have risen since then, so that debentures of this company are now selling at 15% yeild basis.

Determine the current indicated/expected market price of the debentures. Would you like to buy the debentures for Rs. 700?

Now assume that the debentures of the company are selling at Rs. 825. Moreover, if the 12%, Rs. 1000 debentures are not perpetual & have 8 years to run to maturity, compute the approximate effective yield an investor would earn on his investment.

(c) Your supervisor has asked you to evaluate the relative attractiveness of the stocks of two very similar chemical companies: LCC and AOe. AOC and LCC have June 30 fiscal year ends. You have compiled the data below for this purpose. Use a one-year time horizon and assume the following :

- **Real GDP is expected to rise 5 percent;**
- **S & P 500 expected total return of 20 percent;**
- **U.S. Treasury bills yield 5 percent; and**
- **30-year U.S. Treasury bonds yield 8 percent.**

Particulars	LCC	AOC
Current stock price	$50.00	$30.00
Shares outstanding (Millions)	10.00	20.00
Projected earnings per share (FY 1996)	$4.00	$3.20
Projected dividend per share (FY 1996)	$0.90	$1.60
Projected dividend growth rate	8%	7%
Stock beta	1.20	1.40
Balance sheet data (million)		
Long term debt	$100	$130
Stockholders' equity	$300	$320

(i) Calculate the value of the common stock of LCC and AOC using the constant-growth DDM. Show your work.

(ii) Calculate the expected return over the next year of the common stock of LCC and AOe using the CAPM. Show your work.

(iii) Calculate the internal (implied, normalized, or sustainable) growth rate of Lee and AOe. Show your work.

(iv) Recommend LCC or AOC for investment. Justify your choice using your answers to A, B, and C and the information in the Table.

Answer 6. (a)

Investor Protection Fund is the fund set up by the Stock Exchanges to meet the legitimate investment claims of the clients of the defaulting members that are not of speculative nature. SEBI has prescribed guidelines for utilisation of IPF at the Stock Exchanges. The Stock Exchanges have been permitted to fix suitable compensation limits, in consultation with the IPF/CPF Trust. It has been provided that the amount of compensation available against a single claim of an investor arising out of default by a member broker of a Stock Exchange shall not be less than Rs. 1 lakh in case of major Stock Exchanges viz., BSE and NSE, and Rs. 50,000/- in case of other Stock Exchanges.

Answer 6. (b)

(i) For Perpetual Bonds, the value is given as

$$B_0 = \frac{INT}{K_d}$$

Here INT = 0.12 × 1000 = 1200

K_d = 15%

Therefore, at a yield of 15%, acceptable current price would be $= \frac{120}{0.15} =$ Rs. 800

Thus we would buy the debentures at Rs. 700, which is Rs. 100 cheaper than the expected market price i.e. Rs. 800.

(ii) Now current market price is Rs. 825 and is redeemable after 8 years. We now need to find the YTM matching these data.

Approximate YTM can be given by

$$= \frac{C + \text{Pro-rated Discount}}{(M+P)/2} = \frac{C+(M-P)/n}{(M+P)/2} = \frac{120 + {}^{175}\!/_{8}}{(1000+825)/2} = 0.1554 = 15.5\%$$

Where C is the annual coupon payment ; M is the maturity Value of Bond

P is the current price of the Bond

Thus we try to find the exact YTM using discount factor of 16%

[Use approximate YTM formula to find the lower and upper rates for interpolation]

However, in this example, discount factor of 16%, approximates to Rs. 825.

Year	Events	Cash flow	PV factor 16%	PV of Cash Flows
1-8	Interest	120	4.3436	521.230
8	Maturity	1000	0.3050	305.000
TOTAL				**826.230**

Thus we find that for discount rate of 16%, the debenture value approximates to Rs. 825. Therefore YTM ~ 16%, which is the effective yield the investor would look for on his investment.

Answer 6. (c)

(i) Using the constant-growth dividend discount model, $V_0 = D_1 /(k – g)$

For LCC : V_0 = \$0.90/ (0.10 – 0.08) = \$45.00

For AOC : V_0 = \$1.60/ (0.11 – 0.07) = \$40.00

(ii) Using the CAPM, the expected return $r = R_F + \beta[E(R_M) – R_F]$

For LCC : r = 8% + 1.2(20% – 8%) = 22.4%

For AOC : r = 8% + 1.4(20% – 8%) = 24.8%

Alternatively, using CAPM and using the Treasury bill rate as the risk-free rate

For LCC : r = 5% + 1.2(20% – 5%) = 23%

For AOC : r = 5% + 1.4(20% – 5%) = 26%

(iii) The internal growth rate is g = b × ROE = [(E – D)/E] × (E/BV)

For LCC : BV = $300/10 = $30

∴ g = [($4.00 – $0.90)/$4.00] × ($4.00/$30) = 0.775 × 13.33% = 10.33%

For AOC : BV = $320/20 = $16

∴ g = [($3.20 – $1.60)/$3.20] × ($3.20/$16) = 0.50 × 20% = 10.00%

(iv) *Recommendation* : AOC is a more attractive investment than LCC based on the answers to parts A, B, and C and the information provided in the Table.

Justification : Using the constant-growth dividend discount model (DDM), the stock price of AOC is more attractive, at a price of $30 (well below its DDM value of $40), than that of LCC. LCC's internal growth rate (computed in part C) is higher than that of AOC, but LCC's higher *PIE* of 12.5 ($50/$4) versus 9.4 ($30/$3.20) for AOC is not justified by the small difference in growth rates.

Q. 7. (a) A call option on Fag Bearing, anon dividend paying stock, currently trades for Rs. 4. The expiration date of the option is February 25 of next year. The exercise price of the option is Rs. 45.

(i) If this is an American option, on what dates can the option be exercised?

(ii) If this is European option on what dates can the option be exercised?

(iii) Suppose the current price of Fag Bearings is Rs. 35 per share, is this option worthless?

(b) Is the 'zero coupon' yield curve only useful for talking about zero coupon bonds?

(c) A stock is currently trading for Rs. 28. The riskless interest rate is 6 per cent per annum continuously compounded. Estimate the value of European call option with a strike price of Rs. 30 and a time of expiration of 3 months. The standard deviation of the stock's annual return is 0.44. Apply BS model.

Answer 7. (a)

(i) If the option is American, it can be exercised on any date upto and including its expiration on February 25.

(ii) If the option is European, it can only be exercised on its expiration date, February 25.

(iii) The option is not worthless. There is a chance that the stock price of Fag Bearings will rise above Rs. 45 sometime before the option's expiration on February 25. IN this case, a call option with a strike price of Rs. 45 would be valuable at expiration. The probability of such an vent happening is built into the current price of the option.

Answer 7. (b)

No. Besides zero coupon instruments, the ZCYC (Zero Coupon Yield Curve) can be used to price a wide range of securities including coupon paying bonds, derivatives, interest rate forwards and swaps. In arriving at the ZCYC for a coupon bearing instrument ,what can be simply done , is stripped the 'n' cash flows into 'n' zero coupon instruments, the first 'n-1' being coupon payments and the 'n'th being the terminal coupon plus redemption amount.

Answer 7. (c)

Spot price of the share (S)	Rs. 28
Exercise price of the call option (E)	30
Risk-free interest rate (r)	0.06
Time remaining for expiration (t) = 3 months = 3/12 (year)	0.25
Volatility of the stock (σ)	0.44

The value of European call option can be obtained by using Black-scholes option pricing model.

$$C = S\,N(d_1) - E_e^{-rt}\,N(d_2)$$

Computation of call option essentially requires calculation of three values, viz., d_1, d_2 and present value of the exercise price (E_e^{-rt}).

$$d_1 = \frac{\ln S/E + (r + \sigma^2/2)t}{\sigma\sqrt{t}}$$

Substituting values from the information given above we get

$$d_1 = \frac{\ln(28/30) + (0.06 + (0.44)^2/2)\,0.25}{0.44\sqrt{0.25}}$$

$$d_1 = \frac{\ln(0.9333) + (0.06 + 0.968)\,0.25}{0.44\,(0.5)}$$

$$\ln(0.9333) = \text{Log}_{10}(0.9333) \times 2.3026$$

$$= (\bar{1} + 9700) \times 2.3026$$

$$= (\bar{1} + 0.9700) \times 2.3026$$

$$= -2.3026 + 2.2335$$

$$\ln(0.9333) = -0.0691$$

$$d_1 = \frac{-0.0691 + 0.0392}{0.22} = -0.1359$$

$$d_2 = d_1 - \sigma\sqrt{t} = -0.1359 - (0.44)\sqrt{0.25}$$

$$d_1 = -0.3559$$

and $$Ee^{-rt} = 30\ e^{-(0.06 \times 0.25)} = 30\ e^{-0.015}$$

$$= e^{-0.02}\ (e^{-0.02} = 0.9802 \text{ as per Table A} - 7)$$

$$= 30\,(0.9802) = 29.406$$

The equation of call option looks like C = 28 N (– 0.1359) – 29.406 N (– 0.3559)

The next step is to look up the values of a cumulative standardised normal probability distribution at (– 0.1359) and (– 0.3559)

N (– 0.1359) = N (– 0.13) – 0.59 [N (– 0.13) – N (– 0.14)]
= 0.4483 – 0.59 [0.4483 – 0.4443]
= 0.4483 – 0.00236 = 0.4459

N (– 0.3559) = N (– 0.35) – 0.59 [N (– 0.35) – N (– 0.36)]
= 0.3632 – 0.59 [0.3632 – 0.3594]
= 0.3632 – 0.00224 = 0.3610

C = 28 (0.4459) – 29.406 (0.3610)
= 12.4852 – 10.6156 = Rs. 1.87

Thus, the value of European call option is Rs. 1.87

Q. 8. (a) A currency trader working at ONS capital management, expects higher volatility in the foreign exchange market owing to uncertain geopolitical situation. He expects the rupee to either appreciate by 2 per cent or depreciate by 2 per cent in comparison to the US $ in 30 days time. He assumes equal probability for the two scenarios. The currency quote machine installed at ONS capital management is flashing the following quotes :

Spot	**Rs. 48/US $**
Future rate (for one month)	**48.7650/US $**
Call option (strike price Rs. 48, one month)	**0.8900/US $**
Put option (strike price Rs. 48, one month)	**0.2000/US $**

(i) What strategy should the currency trader adopt?

(ii) If at the end of one month the spot rate is Rs. 49.35/US $, what is the return on investments?

(b) Dua Manufacturing (DM) has under consideration refunding of Rs. 2 crore out-oustanding bonds at Rs. 1,000 par value as a result of recent decline in long-term interest rates. The bond-refunding plan involves issue of Rs. 2 crore of new bonds at the lower interest and the proceeds to call and retire the Rs. 2 crore outstanding bonds. The DM is in 35 per cent tax bracket.

The details of the new bonds are : (i) sale at per value of Rs. 1,000 each, (ii) 11 per cent coupon rate, (iii) 20-years maturity, (iv) flotation costs, Rs. 4,00,000, and (v) a 3-month period of overlapping interest.

DMs outstanding bonds were initially issued 10 years ago with a 30-year maturity and 13 per cent coupon rate of interest. They were sold at Rs. 12 poar bond discount from par value with floation costs amounting to Rs. 1,50,000 and their call at Rs. 1,130.

Assuming 7 per cent after -tax cost of debt, analyse the bond-refunding proposal. Would you recommend it? Why?

Answer 8. (a)

Sopt rate = Rs. 48/US $: the spot rate after 30 days is

For 2 per cent appreciation in the rupee,

Rs. 48/(1 + 0.02) = Rs. 47.0588/US $

For 2 per cent depreciation in the rupee

Rs. 48/(1 – 0.02) = Rs. 48.9796/US $

So after 30 days the trader expects the spot rate (settlement rate for option or future) to be either Rs. 47.0588/US $ or Rs. 48.9796/US $.

To get benefit from this expectation, the trader cannot use the futures market. Because if the trader takes a long position by buying futures at Rs. 48.7650/US $, it can earn only if the settlement rate is Rs. 48.9796/ US $, whereas for a settlement rate of Rs. 47.0588 the trader will suffer loss. Similarly, if the trader takes a short position by selling futures, he can earn only if settlement rate is Rs. 47.0588, whereas the will loose if settlement rate is Rs. 48.9796/US $.

Also, buying only call or only put will not give profit in both expected settlement rate. Appropriate strategy for the trader at ONS capital manamgement will be to buy call and simultaneously also buy put. As call will be providing profit for depreciation in rupees (settlement rate Rs. 48.9796/US $) and put will be providing profit for appreciation in rupees (settlement rate Rs. 47.0588/US $).

For a settlement rate of Rs. 49.3500/US $

Profit = Profit from call option + Profit from put option

{Max [(Settlement rate – Strike rate), 0] – Call premium} + {Max [(Strike rate – Settlement rate), 0] – Put premium

= {Max [Rs. 49.3500/US $ – Rs. 48.000/US $), 0] – Rs. 0.8900/US $} +

{Max [Rs. 48.000/US $ – Rs. 49.3500/US $), 0] – Rs. 0.2000/US $}

{Rs. 1.35/US $ – Rs. 0.89/US $} + {0 – Rs. 0.2000/US $} = Rs. 0.26/US $.

Return on investment

Investment in buying a call and a put = Rs. 0.8900/US $ + Rs. 0.2000/US $ = Rs. 1.09/US $.

So the return on investment = (0.26/1.09) × 100 = 23.85 per cent per month.

Answer 8. (b)

Decision analysis for bond refunding decision

Present value of annual cashflow savings (*Refer working note 2*)	
Rs. 2,62,450 ×10.594 ($PVIF_{7, 20}$)	Rs. 27,80,395
Less : Initial investment (*Refer working note 1*)	24,21,500
Net present value of refunding	3,58,895

Decision : As the NPV is positive, the proposed bond-refunding is recommended.

Working Notes :

1. Initial investment :

Particulars	**Rs.**	**Rs.**
(a) Call premium :		
Before tax [(Rs. 1,130 – Rs. 1,000) × 20,000 bonds]	26,00,000	
Less : Tax (0.35 × Rs. 26,00,000)	9,10,000	
After-tax cost of call premium		16,90,000
(b) Flotation cost of new bond		4,00,000
(c) Overlapping interest :		
Before tax [(Rs. 0.13 × 3/12 # × Rs. 2 crore)	6,50,000	
Less : Tax (0.35 × Rs. 6,50,000)	2,27,500	
After-tax cost of overlapping interest		4,22,500
(d) Tax savings from unamortised discount on old bond		
[25/30## × (20,000 bonds × Rs. 12/bond discount) × 0.35		(56,000)
(e) Tax savings from unamortised flotation cost of old		
bond (20/30## × Rs. 1,50,000 × 0.35)		(35,000)
		24,21,500
#3 months ÷ 12 months		
##20 years maturity ÷ 30 years maturity		

2. Annual cash flow savings :

Particulars	Rs.	Rs.	Rs.
(a) Old bond			
(i) Interest cost :			
Before tax (0.13 × Rs. 2 crore)	26,00,000		
Less : Tax (0.35 × Rs. 26,00,000)	9,10,000		
After tax interest cost		16,90,000	
(ii) Tax savings from amortisation of			
discount [(Rs. 2,40,000* ÷ 30) × 0.35]		(2,800)	
(iii) Tax savings from amortisation of			
flotation cost [(Rs. 1,50,000 ÷ 30) × 0.35]		(1,750)	
Annual after-tax debt payment (a)			16,85,450
(b) New bond			
(i) Interest cost :			
Before tax (0.11 × 2,00,00,000)	22,00,000		
Less : Taxes (0.35 × Rs. 22,00,000)	7,70,000		
After tax interest cost		14,30,000	
(ii) Tax savings from amortisation of			
flotation cost [Rs. 4,00,000 ÷ 20) × 0.35]		(7,000)	
Annual after tax debt payment (b)			14,23,000
*20,000 bonds × Rs. 12 per bond			
Annual cash flow savings [(a) – (b)]			2,62,450

Q. 9. (a) Mr. X on 1.7.2008, during the initial offer of some Mutual Fund invested in 10,000 units having face value of Rs. 10 for each unit. On 31.3.2001 the dividend operated by the MF was 10% and Mr. X found that his annualized yield was 153.33%. On 31.12.2010, 20% dividend was given. On 31.3.2011 Mr. X redeemed all his balance of 11,296.11 units when his annualized yield was 73.52%. What are the NAVs as on 31.3.2009, 31.12.2010 and 31.3.2011?

(b) Gentry Motor Inc. a producer of turbine generators, is in this situation :

EBIT	**Rs. 40 lakh**
Tax rate (t)	**35%**
Debt outstanding (D)	**Rs. 20 lakhs**
K_d	**10%**
K_e	**15%**
Shares of stock outstanding (Nos.)	**6,00,000**
Book value per share	**Rs. 10**

Since Gentry's product market is stable and the company expects no growth, all earnings are paid out as dividends. The debt consists of perpetual bonds.

(i) What are the Gentry's earning per share (EPS) and its price per share (P_o)?

(ii) What is Gentry's weighted average cost of capital (K_o)?

(iii) Gentry can increase its debt by Rs. 80 lakhs, to a total of Rs. 1 crore, using the new debt to buy back and retire some of its shares at the current price. Its interest rate on debt will be

12% (it will have to call and refund the old debt), and its cost of equity will rise from 15% to 17%. EBIT will remain constant. Should Gentry change its capital structure?

Answer 9. (a)

Date of Investment	Action	NAV	Units held	Return
1.7.2008	Original Purchase	Rs. 10	10000	—
31.3.2009	Dividend 10%	?	?	153.33%
31.12.2010	Dividend 20%	?	?	—
31.3.2011	Full Redemption of 11296.11 units	?	0	73.52%

Note :

No information on dividend re-investment is given. We assume that dividends are reinvested, because the number of units at redemption has increased, indicating dividends have been re-invested.

As on 31.3.2009, we have Annualized yield of 153.33%. Therefore we have as follows :

$$\text{Annualized Yield } = \frac{(\text{Closing Value} - \text{Opening NAV})}{\text{Original NAV}} \times \frac{12}{n} \times 100$$

For 9 months period from the beginning :

$$\text{Annualized Yield } = \frac{(\text{Closing Value} - 10)}{10} \times \frac{12}{9} \times 100 = 153.33$$

Solving we get, Closing Value = **NAV as on 31.3.2009** = Rs. 21.50 (dividend of 10%)

Now, we have 10% declaration of dividend on 31.3.2009. For 10000 units @ 10% o FV of Rs. 10, Re. 1 would be paid i.e. Rs. 10000. This converted at Rs. 21.50 would allot 465.11 units to Mr. X. His total units would then be 10465 .11 units.

Further payment of 20% dividend on 31.12.2010 means Rs. 20930.22 (10465.11 × Rs. 2) would be used to issue further units to Mr. X in such a way that total units would be equal to 11296.11 units (the final balance); i.e. 11296.11-10465.11 = 831 units allotment on 31.12.2010. If 831 units were issued for Rs. 20930.22, the **NAV as on 31.12.2010** should have been = Rs. 20930.22/831 = Rs. 25.1868.

Now we are given Annualized Yield as on 31.3.2011 = 73.52%. Using the above formula we find the closing NAV as on 31.3.2011.

$$\text{Annualized Yield } = 73.52 = \frac{\text{Closing NAV} - 25.1868}{25.1868} \times \frac{12}{3} \times 100$$

i.e. closing NAV as on **31.3.2011** should be = Rs. 29.8161

Answer 9. (b)

Kd = $I(1-t)$

10% = $I(1-0.35)$

$\therefore$ Interest (i) = 15.3846%

(i) Calculation of Earning Per Share and Price Per Share

Particulars		**Rs.**
EBIT		40,00,000
Interest	(20,00,000 × 15.3846/100)	3,07,692
EBT (Earnings before Tax)		36,92,308
Less : Taxes (35%)		12,92,308
PAT (Profit after Tax)		24,00,000

$$EPS = \frac{Rs.\ 24,00,000}{6,00,000} = Rs.\ 4.00$$

$$K_e = \frac{E}{P_0} \quad \text{or,}\ 0.15 = \frac{4}{P_0} = 26.67$$

(ii) Calculation of Weighted Average Cost of Capital (K_o) (Rs.)

Equity	(6,00,000 × Rs. 10)	60,00,000
Debt		20,00,000
Total capital		80,00,000

$$K_o = (K_e \times W_1) + (K_d \times W_2)$$
$$= (0.15 \times 0.75) + (0.10 \times 0.25) = 0.1375 \text{ or } 13.75\%$$

(iii) (Rs.)

EBIT		40,00,000
Interest	(1,00,00,000 × 0.12)	12,00,000
EBT		28,00,000
Less : Taxes (35%)		9,80,000
PAT		18,20,000

Shares Bought and Retired

$$\Delta N = Debt/P_o = Rs.\ 80,00,000/26.67 = 2,99,963 \text{ shares}$$

New Outstanding Shares

$$N = N_o - \Delta N = 6,00,000 - 2,99,963 = 3,00,037$$

$$\text{New EPS} = 18,20,000/3,00,037 = Rs.\ 6.07$$

$$\text{New Price Per Share } (P_o) = 6.07/0.17 = Rs.\ 35.71$$

Results :

(a) New EPS Rs. 6.07 as aginst existing EPS of Rs. 4.00

(b) New price per share Rs. 35.71 as against existing price per share of Rs. 26.67

Therefore, Gentry should change its capital structure.

Q. 10. (a) What do you mean by ETF (Exchange Traded Funds)? State in brief the applications of it.

(b) A firm has a bond outstanding Rs. 3,00,00,000. The bond has 12 years remaining until maturity, has a 12.5% coupon and is callable at Rs. 1,050 per bond; it had floatation costs of Rs. 4,20,000, which are being amortised at Rs. 30,000 annually. The floatation costs for a new issue will be Rs. 9,00,000 and the current interest rate will be 10%. The after tax cost of the debt is 6%. Should the firm refund the outstanding debt? Show detailed workings. Consider corporate income-tax rate at 50%.

Answer 10. (a)

Exchange Traded Funds **(**ETFs) are just what their name implies: baskets of securities that are traded, like individual stocks, on an exchange. Unlike regular open-end mutual funds, ETFs can be bought and sold throughout the trading days, like any stock.

The concept of ETF first came into existence in the USA in 1993. It took several years to attract public interest. But once it was done, the volumes took off with a retaliation . Most ETFs charge lower annual expenses than index mutual funds. However, as with stocks, one must pay a brokerage to buy and sell ETF units, which can be a significant drawback for those who trade frequently or invest regular sums of money.

The funds rely on an arbitrage mechanism to keep the prices at which they trade roughly in line with the net asset values of their underlying portfolios. For the mechanism to work, potential arbitragers need to have full and timely knowledge of a fund's holdings.

Applications of ETF are :

(i) Managing Cash Flows - Investment and fund managers, who see regular inflows and outflows, may use ETFs because of their liquidity and their capability to represent the market.

(ii) Diversifying Exposure - If an investor is not aware about the market mechanism and does not know which particular stock to buy but likes the overall sector, investing in shares tied to an index or basket of stocks, provides diversified exposure and reduces risk.

(iii) Efficient Trading - ETFs provide investors a convenient way to gain market exposure viz. an index that trades like a stock. In comparison to a stock, an investment in an ETF index product provides a diversified exposure to the market

(iv) Shorting or Hedging - Investors who have a negative view on a market segment or specific sector may want to establish a short position to capitalize on that view. ETFs may be sold short against long stock holdings as a hedge against a decline in the market or specific sector.

(v) Filling Gaps - ETFs tied to a sector or industry may be used to gain exposure to new and important sectors. Such strategies may also be used to reduce an overweight or increase an underweight sector.

(vi) Equitising Cash - Investors having idle cash in their portfolios, may want to invest in a product tied to a market benchmark. An ETF, is a temporary investment before deciding which stocks to buy or waiting for the right price.

Answer 10. (b)

(i) Calculation Present Value of Saving in Interest by Issue of New Bonds Replacing Old Bonds

Interest on bond outstanding p.a.	= 3,00,00,000 × 12.5 / 100	= Rs. 37,50,000
Interest on new bonds p.a	= 3,00,00,000 × 10 / 100	= Rs. 30,00,000
Savings in interest by issue of new bonds	= (37,50,000 – 30,00,000) (1 – 0.50)	
P. V. of savings in interest (@ 6% for 12 years)	= 3,75,000 × 8.384	= Rs. 31,44,000

(ii) Saving of Call Premium

Call premium per bond = Callable value – Face value = 1,050 – 1,000 = Rs. 50

or = $\frac{50}{1,000} \times 100 = 50\%$

Total call premium = (3,00,00,000 ×5 / 100) (1 – 0.50) = Rs. 7,50,000

(iii) Floatation Costs

The floatation cost of issue of new callable bonds to mobilize Rs. 300 lakhs will be Rs. 9,00,000.

Amortisation of floatation cost p.a. (after tax) = (9,00,000 / 12) (1 – 0.50) = Rs. 3,14,000

P. V. of floatation cost amortised (after tax) (@6% p.a. for 12 years)

= 37,500 × 8.384 = Rs. 3,14,400

(iv) P. V. of Tax Saving by Amortisation of Outstanding Bonds

P. V. of immediate tax savings		= Rs. 1,80,000
P. V. of tax saving if outstanding debt is continued	= 30,000 × 0.50 × 8.384	= Rs. 1,25,760
P. V. of net tax saving	= 1,80,000 – 1,25,760	= Rs. 54,240

Calculation of Total Net Savings by Replacing Outstanding Bonds with New Issue of Callable Bonds

(Rs.)

P. V. of interest savings		31,44,000
P. V. of tax savings on floatation cost amortised of old bonds		3,14,400
P. V. of tax savings by amortisation of old debt		54,240
		35,12,640
Less : Cash outflow on floatation cost	9,00,000	
Call premium	7,50,000	16,50,000
P. V. of net savings if outstanding bonds are replaced with callable bonds		18,62,640

Analysis – It is suggested to replace the outstanding bonds with new debt by issue of callable bonds.

Q. 11. (a) What is an Index and Index Future?

(b) Why are indices important?

(c) X Co. Ltd. invested on 1.4. 2009 in certain equity shares as below :

Name of Co.	**No. of shares**	**Cost (Rs.)**
M Ltd.	**1,000 (Rs. 100 each)**	**2,00,000**
N Ltd.	**500 (Rs. 10 each)**	**1,50,000**

In September, 2009, 10% dividend was paid out by M Ltd. and in October, 2009, 30% dividend paid out by N Ltd. On 31.3.2010 market quotations showed a value of Rs. 220 and Rs. 290 per share for M Ltd. and N Ltd. respectively.

On 1.4.2010, investment advisors indicate (a) that the dividends from M Ltd. and N Ltd. for the year ending 31.3.2011 are likely to be 20% and 35%, respectively and (b) that the probabilities of market quotations on 31.3.2011 are as below :

Probability factor	**Price/share of M Ltd.**	**Price/share of N Ltd.**
0.2	**220**	**290**
0.5	**250**	**310**
0.3	**280**	**330**

You are required to :

(i) Calculate the average return from the portfolio for the year ended 31.3.2010;

(ii) Calculate the expected average from the portfolio for the year 2010-11; and

(iii) Advise X Co. Ltd., of the comparative risk in the two investments by calculating the standard deviation in each case.

Answer 11. (a)

An Index is a number used to represent the changes in a set of values between a base time period and the current time. A stock index represents change in the value of a set of stocks which constitute the index over a base year.

An index future is a derivative whose value is dependent on the value of the underlying asset (e.g. BSE Sensex, S&P CNX NIFTY). While trading on index futures, an investor is basically buying and selling the basket of securities comprising an index in their relative weights. Unlike commodity and other futures contracts, Index Future contracts are settled in cash.

Answer 11. (b)

By looking at an index we know how the market is faring. The index is a lead indicator of how the overall portfolio will fare. Owing to direct applications in finance, in the form of index funds and index derivatives, in recent years, indices have gained more popularity. Index funds are funds which passively 'invest in the index'. Index derivatives allow people to cheaply alter their risk exposure to an index (which is called hedging) and to implement forecasts about index movements (which are called speculation). Using index derivatives, as hedging, has become a central part of risk management in the modern economy. These applications are now a multi-trillion dollar industry worldwide, and they are critically linked up to market indices. Finally, indices serve as a benchmark for measuring the performance of fund managers. For e.g., an all-equity fund, should obtain returns like the overall stock market index. A 50:50 debt: equity fund should obtain returns close to those obtained by an investment of 50% in the index and 50% in fixed income.

Answer 11. (c)

(i) Calculation of Average Return from the Portfolio for the year ended 31.3.2010 (Rs. / share)

Particulars		**M Ltd.**	**N Ltd.**
Dividend received during the year	(a)	10	3
Capital gain / (loss) by 31.3.2010			
Market value by 31.3.2010		220	290
Cost of investment		200	300
Capital gain / (loss)	(b)	20	(10)
Yield per share	(a) + (b)	30	(7)
Return per share (%)		15%	(2.33%)
Weight in the portfolio		57%	43%
Weight return		8.55%	(1.00%)

Weight average return = 8.55 + (– 1.00) = 7.55%

(ii) Calculation of Expected Average Return from the Portfolio for the year 2010-11 (Rs. / shares)

Particulars	**M Ltd.**	**N Ltd.**
Expected dividend	20	3.5
Capital gain by 31.3.2011 :		
[(220 × 0.2) + (250 × 0.5) + (280 × 0.3) – 220]	33	–
[(220 × 0.2) + (310 × 0.5) + (330 × 0.3) – 290]	–	22
Yield per share		
Market value on 1.4.2010 (base value)	220	290
Return per share (%)	24.09%	8.79%
Weight of portfolio (1000 × 220); (500 × 290)	60.3%	39.7%
Weighted return (%)	14.53%	3.49%

Expected weighted average return for 2010-11 = 14.53 + 3.49 = 18.02%

(iii) Analysis of Comparative Risk in two investments by calculating the Standard Deviation in each case

Standard Deviation of Returns in M Ltd. Investment

Expected market value	Expected gain	Expected dividend	Expected yield	Deviations	Square of deviations	Probability factor	Square of deviations x Probability
220	0	20	20	– 33	1089	0.2	217.80
250	30	20	50	– 3	9	0.5	4.50
280	60	20	80	27	729	0.3	218.70
							441.00

Standard deviation $= \sqrt{441} = 21$

Standard Deviation of Returns in N Ltd. Investment

Expected market value	Expected gain	Expected dividend	Expected yield	Deviations	Square of deviations	Probability factor	Square of deviations x Probability
290	0	3.5	3.5	– 22	484	0.2	96.80
310	20	3.5	23.5	– 2	4	0.5	2.00
330	40	3.5	43.5	18	324	0.3	97.20
							196.00

Standard deviation $= \sqrt{196} = 14$

Analysis – The standard deviation of returns in investments in M Ltd. is more than investment in N Ltd. Hence, in investments in M Ltd. shares is more risky than in N Ltd.

Q. 12. (a) The rates of return on the security of Company P and market portfolio for 10 periods are given below :

Period	**Return of Security P (%)**	**Return on Market Portfolio (%)**
1	**20**	**22**
2	**22**	**20**
3	**25**	**18**
4	**21**	**16**
5	**18**	**20**
6	**-5**	**8**
7	**17**	**-6**
8	**19**	**5**
9	**-7**	**6**
10	**20**	**11**

(i) What is the beta of Security P?

(ii) What is the characteristic line for Security P?

(b) XYZ Ltd. has substantial cash flow and until the surplus funds are utilized to meet the future capital expenditure, likely to happen after several months, are invested in a portfolio of short-term equity investments, details for which are given below :

Intestment	No. of share	Beta	Market price per share (Rs.)	Expected dividend yield
I	60,000	1.16	4.29	19.50%
II	80,000	2.28	2.92	24.00%
III	1,00,000	0.90	2.17	17.50%
IV	1,25,000	1.50	3.14	26.00%

The current market return is 19% and risk free rate is 11%.

***Required* :**

(i) Calculate the risk of XYZ's short-term investment portfolio relative to that of the market;

(ii) Whether XYZ should change the composition of its portfolio.

Answer 12. (a)

(i)

Period	Rx	Rm	$(R_x - \bar{R}_x)$	$(R_m - \bar{R}_m)$	$(R_x - \bar{R}_x)(R_m - \bar{R}_m)$	$(R_m - \bar{R}_m)^2$
1	20	22	5	10	50	100
2	22	20	7	8	56	64
3	25	18	10	6	60	36
4	21	16	6	4	24	16
5	18	20	3	8	24	64
6	-5	8	-20	-4	80	16
7	17	-6	2	-18	-36	324
8	19	5	4	-7	-28	49
9	-7	6	-22	-6	132	36
10	20	11	5	-1	-5	1
	150 $= \Sigma R_x$	120 $= \Sigma R_m$			357 $= \Sigma (R_x - \bar{R}_x)(R_m - \bar{R}_m)$	706 $= \Sigma (R_m - \bar{R}_m)^2$

$$\bar{R}_x \frac{\Sigma R_x}{n} = \frac{150}{10} = 15 \; ; \qquad \bar{R}_m \frac{\Sigma R_m}{n} = \frac{120}{10} = 12$$

$$\sigma_m^2 = \frac{\Sigma (R_m - \bar{R}_m)^2}{n-1} = \frac{706}{9} = 78.44$$

$$Cov_{xm} = \frac{\Sigma (R_x - \bar{R}_x)(R_m - \bar{R}_m)}{n-1} = \frac{357}{9} = 39.67$$

$$\beta_x = \frac{Cov_{xm}}{\sigma_m^2} = \frac{39.67}{78.44} = 0.506$$

(ii) Y = 15, x = 12

$$Y = \alpha + \beta x$$

$$15 = \alpha + (0.506 \times 6)$$

$$a = 15 - (0.506 \times 12) = 8.928\%$$

Characteristic Line for Security P $= \alpha + (\beta \times R_m)$

Where R_m = Expected return on market index

$\therefore$ Characteristic Line for Security P $= 8.928 + 0.506R_m$

Answer 12. (b)

(i) Calculation of risk of XYZ's short-term investment portfolio relative to that of the market.

Computation of Return of Portfolio

Investment	No. of shares	Market price (Rs.)	Market value (Rs.)	Dividend yield (%)	Dividend (Rs.)
I	60,000	4.29	2,57,400	19.5	50,193
II	80,000	2.92	2,33,600	24.0	56,064
III	1,00,000	2.17	2,17,000	17.5	37,975
IV	1,25,000	3.14	3,92,500	26.0	1,02,050
			11,00,500		2,46,282

Return of the portfolio $= \frac{\text{Rs. } 2,46,282}{\text{Rs. } 11,00,500} \times 100 = 22.38\%$

Calculation of Beta of Portfolio

Investment	No. of shares	Market price (Rs.)	Market value (Rs.)	Composition	Beta	Weighted Beta
I	60,000	4.29	2,57,400	0.2339	19.5	0.271
II	80,000	2.92	2,33,600	0.2339	24.0	0.484
III	1,00,000	2.17	2,17,000	0.2339	17.5	0.177
IV	1,25,000	3.14	3,92,500	0.2339	26.0	0.535
			11,00,500	1.0000		1.467

Beta of the Portfolio = 1.467

Market Risk Implicit

$$0.2238 = 0.11 + \beta\ (0.19 - 011)$$

$$0.2238 = 0.11 + \beta\ 0.08$$

$$\beta\ 0.08 = 0.2238 - 0.11$$

$$\beta = 0.1138/0.08 = 1.423$$

The market implicit beta is 1.423 whereas the portfolio beta is 1.467. It is implied that the portfolio is marginally risky as compared to the market.

(ii) Whether XYZ Ltd. should change the compostion of its portfolio

Expected return (R_i) $= R_f + \beta (R_m - R_f)$

Calculation of Expected Return of Investment

Investment I = 0.11 + 1.16 (0.19 - 0.11) = 20.28%

Investment II = 0.11 + 2.28 (0.19 - 0.11) = 29.24%

Investment III = 0.11 + 0.90 (0.19 - 0.11) = 18.20%

Investment IV = 0.11 + 1.50 (0.19 - 0.11) = 23%

Intestment	**Expected return (%)**	**Dividend yield (%)**	**Change in composition needed or not**
I	20.28	19.50	Reduce proportion
II	20.24	24.00	Reduce proportion
III	18.28	17.50	Reduce proportion
IV	23.28	26.00	Increase proportion

In case of Investment IV, the dividend yield is more than the expected return and its proportion in total portfolio to be increased and it the rest of investments the proportion of investment to be reduced.

Q. 13. (a) You as a dealer in foreign exchange have the following position in Swiss Frances on 31st October, 2010 :

	Sw. Fcs.
Balance in the Nostro A/c credit	**1,00,000**
Opening position overbought	**50,000**
Purchased a bill on Zurich	**80,000**
Sold forward TT	**60,000**
Forward purchased contract cancelled	**30,000**
Remitted by TT	**75,000**
Draft on Zurich cancelled	**30,000**

What steps would you like, if you are required to maintain a credit balance of Sw. Fcs. 30,000 in the Nostro A/c and keep as overbought position on Sw. Fcs. 10,000?

(b) An investor buys the stocks of Hindustan Lever Ltd. (HLL) worth Rs. 20 lakh due to its very stron fundamentals. However, the market in general is considered to remain weak for about the next three months. The beta of HLL is 1.2 and the current value of NIFTY is 2250 and 3-m futures is selling at 2310. Answer the following :

1. **How can the investor hedge himself against the expected fall in the market?**
2. **Analyse his position (a) if the market falls by 10% in 3 months and HLL drops to Rs. 178 from Rs. 200 (b) if the market registers a rise of 6% and HLL rises to Rs. 215 from Rs. 200.**
3. **Given the standard deviations of the market as 12% and HLL as 18%, what is the risk of unhedged portfolio?**

Answer 13. (a)

Swiss Frances Currency Position

Particulars	Purchase of Sw. Fcs.	Sale of Sw. Fcs.
Opening position (over bought)	50,000	–
Bill purchased on zurich	80,000	–
Sold forward TT	–	60,000
Cancellation of forward purchase contract	–	30,000
Remitted by TT	–	75,000
Draft on zurich cancelled	30,000	–
	1,65,000	1,65,000
Closing balance (over sold)	5,000	–
	1,65,000	1,65,000

Nostro A/c (cash position) (Sw. Fcs.)

Particulars	Debit	Credit
Opening balance	–	1,00,000
TT sales	75,000	–
	75,000	1,00,000
Closing balance (credit)	25,000	–
	1,00,000	1,00,000

Steps to be taken :

(a) The dealer is required to buy spot TT Sw. Fcs. 5,000. This will increase the credit balance is Nostro A/c to Sw. Fcs. 30,0000.

(b) This will reduce the over sold position to nil.

(c) The dealer intends to keep Sw. Fcs. 10,000 over bought position. It requires to buy forward Sw. Fcs. 10,000.

Answer 13. (b)

1. One option for the investor was to wait for three months and then buy. He runs the risk of rise in prices of the share of HLL after 3 months. With stock index futures available, he does not need to defer the purchase and take the risk of rise in prices. A better strategy would be to buy the share now; and to protect against the risk of falling market, take a short position in 3-m futures. Since beta of HLL is 1.2 (implies a fall of 1 % in market will result in 1.2% decline in stock value), the futures position must be 1.2 times the position in physical market. Therefore, the investor takes the following steps :
   - Buys stock worth Rs 20 lakh due to strong fundamentals, and
   - Sells 3-m futures worth Rs 24 lakh (1.2 x 20 lakh) to insulate against market risk.

   Nos. of shares of HLL = 20,00,000 / 200 = 10,000

   $$\text{Nos. of futures contract sold} = \frac{\text{Value to be hedge}}{\text{Value of 1 futures contract}}$$

   $$= \frac{24{,}00{,}000}{200 \times 2310}$$

   = 5.19 (Rounded, 5 contracts)

2. (a) Market falls by 10% to 2025 from 2250 and HLL falls to Rs. 178 :

Selling price of futures = 2310
Purchase price of futures = 2025
Gain in futures market = 285
Gain in position of futures = 5 × 200 × 285
= Rs. 2,85,000
Loss on HLL 10,000 shares = (200 – 178) × 10,000
= Rs. 2,20,000
Net Gain = Rs. 65,000

If the investor was unhedged, his loss would be Rs. 2,20,000

(b) Market rises by 6% to 2385 from 2250 and HLL rises to Rs. 215 :

Selling price of futures = 2310
Purchase price of futures = 2385
Loss in futures market = 75
Loss in position of futures = 5 × 200 × 75 = Rs. 75,000
Gain on HLL 10,000 shares = (215 – 200) × 10,000
= Rs. 1,50,000
Net gain = Rs. 75,000

If the investor was unhedged his gain would be Rs. 1,50,000

3. If the investor remained unhedged, he would carry the entire risk of HLL of 18%. With hedged position in futures, the amount of variance reduction is :

$\beta^2\ \sigma_m^2 = (1.2)^2 \times (12)^2 = 207.36$ or standard deviation = 14.4%

Residual variance $= (18)^2 - \beta^2\ \sigma_m^2 = (18)^2 - (1.2)^2 \times (12)^2$

= 116.64 or 10.8%

Hedged portfolio will reduce the risk of the asset from 18% to 10.8%.

Q. 14. (a) Eros Plc and Atlas Plc are two competing and growing firms in Britain catering to the European markets for supplies of office needs. Both the firms are expanding rapidly and in order to fund the growth, are exploring for raising debt from the market.

Eros Plc can mobilize funds at 5.40% in the fixed rate market while in the floating rate market it can do so at LIBOR + 50 bp. Atlas Plc can raise funds at 6.3% on fixed rate basis and at LIBOR + 70 bp in the floating rate market.

Eros Plc is wanting to raise money on floating rate basis, as it expects a fall in the interest rate structure. Contrary to Eros Plc, Atlas Plc is convinced of rise in the interest rates in future, and therefore wants to raise funds on fixed rate basis.

HSBC Bank has advised them to raise money in the markets of opposite choice and then enter into a swap through them by paying 10 bp each.

(i) Show how the swap can benefit both the firms and to what extent?

(ii) If the bank is involved as intermediary and wants 10 bp from each of the firm, with Eros Plc wanting 60% of the remaining benefit, what would be the cost of funds for each?

(iii) What function would the bank discharge as intermediary?

(b) Write short note on diffusion index.

Answer 14. (a)

(i) The position of the two firms in the two markets is as follows :

	Fixed rate market	**Floating Rate market**
Eros Plc	5.40%	LIBOR + 50 bp
Atlas Plc	6.30%	LIBOR + 70 bp
Advantage – Eros Plc	90 bp	20 bp

Comparative advantage, i.e., the difference of the two absolute advantages is 70 bp. The comparative advantage can be exploited by the two firms by arrangeing a swap between them. If the advantage of 70 bp is to be shared equally, the cost of funds for each of them can come down by 35 bp.

(ii) With the bank fixing its earnings at 20 bp (10 bp from each of the party), the comparative advantage that can be exploited by Eros Plc an Atlas Plc reduces to 50 bp. As agreed between the two Eros plc would avail the benefit of 30 bp leaving the remaining 20 bp for Atlas Plc.

Flowing cash flow structure may be formed unde the swap :

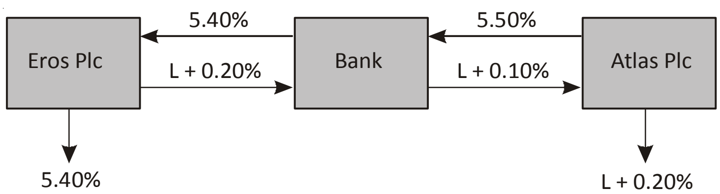
- Eros Plc would access the fixed rate market mobilizing funds at 5.40%

  Under the swap, it would receive fixed 5.40% from the bank and pay floating L + 20 bp to the bank.

- Atlas Plc would access the floating rate market mobilizing funds at L + 70 bp.

  Under the swap, it would pay fixed 5.50% to the bank and receive floating L + 10 bp from the bank.

Swap arrangement is shown in the given diagram.



After the swap, the cost of funds for each firm would be as follows :

	Eros Plc	**Atlas Plc**
Payment to the market	5.40%	L + 70 bp
Payment to bank under swap	L + 20 bp	5.50%
Receipt from bank under swap	– 5.40%	– (L + 10 bp)
Cost of funds with swap	L + 20 bp	6.10%
Cost of funds without swap	L + 50 bp	6.30%
Benefit of swap	30 bp	20 bp

(iii) The role performed by the bank under the swap would be to assume the counter-party risk. In case Eros Plc and Atlas Plc enter into the swap directly both would assume risk of interest payment on each other.

The environment after the swap would be favourable to one and unfavourable to the another leaving scope or default. With the bank in between, both parties are assured of cash flows at specified intervals.

Answer 14. (b)

Diffusion Index : It is a measure of the percentage of stocks that have advanced in price or are showing a positive momentum over a defined period. It is used in the technical analysis of stocks.

It can also be said as a measure of the breadth of a move in any of the Conference Boards Business Cycle Indicators (BCI), showing how many of an indicators components are moving together with the overall indicator index.

It is one of the many different tools used by technical analysts to increase the probability of picking- winning stocks. The diffusion index can help an economist or trader interpret any of the composite indexes of the BCI more accurately - the diffusion index breaks down the indexes and analyzes the components separately, exhibiting the degree to which they are moving in agreement with the dominant direction of the index.

Q. 15. (a) Ritesh holds a well diversified portfolio of stock in XYZ Group. During the last 5 years, returns on these stock have averaged 20% per year and had a standard deviation of 15%. He is satisfied with the yearly availability of his portfolio and likes to reduce its risk without affecting overall returns. He approaches you for help in finding an appropriate diversification medium. After a lengthy review of alternatives, you conclude - (i) future average returns and volatility of returns on his current portfolio will be the same as he has historically expected; and (ii) to provide a quarter degree of diversification in his portfolio, investment could be made in stocks of the following groups :

Groups	**Expected returns**	**Co-relation of returns with XYZ Group**	**Standard deviation**
Rekha Ltd.	**20%**	**+ 1.0**	**15%**
Tina Ltd.	**20%**	**– 1.0**	**15%**
Bipasha Ltd.	**20%**	**+ 0.0**	**15%**

(i) If Ritesh invests 50% of his funds in Rekha Ltd. and leaves the remainder in XYZ Group, would this affect both his expected returns and his risk? Why?

(ii) If Ritesh invests 50% of his funds in Tina Ltd. and leaves the remainder in XYZ Group, how would this affect both his expected return and his risk? Why?

(iii) What should Ritesh do? Indicate precise portfolio weightage.

(b) A sugar mill in Uttar Pradesh is expected to produce 100 MT of sugar in the month of April. The current price today (in the month of February) is Rs. 22 per kg. April futures contract in sugar due on 20 April is trading at Rs. 25 per kg.

The sugar mill apprehends that a lesser price than Rs. 25 per kg will prevail in April due to the excessive supply expected at that time. How can the sugar mill hedge its position against the anticipated decline in sugar prices in April?

Answer 15. (a)

As the expected return of existing portfolio as well as new securities are same, there will not be any change in the return level. However, the portfolio risk, σ_p would be as follows :

$$\sigma_p = \sqrt{W_X^2\,\sigma_X^2 + W_Y^2\,\sigma_Y^2 + 2W_X\,W_Y\,\sigma_X\,\sigma_Y\,\sigma_{XY}}$$

$$\sigma_{XR} = \sqrt{(0.5)^2(15)^2 + (0.5)^2\,(15)^2 + 2\,(0.5)\,(0.5)\,(15)\,(15)\,(1)}$$

$$\sigma_{XR} = \sqrt{56.25 + 56.25 + 112.5}$$

$$\sigma_{XR} = \sqrt{225} = 15$$

Portfolio of XYZ and Tina

$$\sigma_{XT} = \sqrt{(0.5)^2 (15)^2 + (0.5)^2 (15)^2 + 2\,(0.5)\,(0.5)\,(15)\,(15)\,(-1)}$$

$$\sigma_{XT} = \sqrt{56.25 + 56.25 - 112.5}$$

$$\sigma_{XT} = \sqrt{0}$$

(i) Risk and return of XYZ portfolio are the same as those of Rekha portfolio and the correlation coefficient is 1.0. So, there is no diversification gain.

(ii) Return would remain at 20% but risk would fall to zero since r = – 1.0

(iii) Invest 50/50 in XYZ Group portfolio and Group Tina Ltd. portfolio.

Answer 15. (b)

To execute the hedging strategy, the sugar mill has to take opposite position in the futures market. The sugar mill is long on the asset in April. Therefore, it needs to sell the futures contract today. The number of contracts that needs to be sold is dependent upon the exposure in the physical asset and the value that one needs to cover. Assuming that 100% cover of the position in the asset is desired, we can find the number of contracts to be sold.

Quantity to be hedged Number of contracts to be sold $= \dfrac{\text{Quantity to be hedged}}{\text{Quantity in each futures contract}}$

$$= \frac{100\,\text{MT}}{10\,\text{MT}} = 10$$

The sugar mill would go short on futures in February. Prior to April before the future contract expires, the sugar mill buys the future contract to nullify its position in the futures market. The underlying asset, sugar, is sold in the spot market. The price realized by the sugar mill in two different scenarios of decline or rise in sugar prices, using the principle of convergence of price on the due date of the contract, is worked out as shown below :

When the price falls to Rs. 22 per kg.	Cash flow
In the futures market	(Rs per kg.)
Sold futures contract in February	+ 25.00
Bought futures contract in April	-22.00
Gain in the futures market	+ 3.00
Price realized in the spot market	+22.00
Effective price realized	Rs. 25.00

Here the loss of Rs. 3 (Rs. 25 – Rs. 22) in the spot market is made up by the equal gain in the futures market.

When the price rises to Rs 26 per kg.

In the futures market	
Sold futures contract in February	+ 25.00
Bought futures contract in April	-26.00
Loss in the futures market	-1.00
Price realized in the spot market	+26.00
Effective price realized	Rs 25.00

Here the gain of Re 1 (Rs. 26 – Rs. 25) in the spot market is offset by the equal loss in the futures market.

Due to the fact that prices of sugar in the spot market and futures market must converge, a fixed price of Rs. 25 per kg is realized by the sugar mill. The loss or gain in the spot market is fully compensated by gain/ loss in the futures market.

Q. 16. (a) What are factors that affect a value of a call option?

(b) The financial data of G.D. Pharma is as follows :

Paid-up capital (4 lakh shares)	**Rs. 40 lakhs**
Reserve and surplus	**Rs. 180 lakhs**
Profit after tax	**Rs. 32 lakhs**

The P/E multiple of the shares of G.D. Pharma is 7. The company has taken up an expansion project at Ghaziabad. The cost of the project is Rs. 200 lakhs. It proposes to fund it with a term of Rs. 100 lakhs from ICICI and balance by a rights issue. The rights will be priced at Rs. 25 per share (Rs. 15 premium).

You are required to calculate :

(i) The value of the rights and the market capitalization of G.D. Pharma after the rights issue, and

(ii) The Net Asset Value (NAV) of the shares after the rights issue.

Answer 16. (a)

The factors that affect the value of a Call option are :

(i) An increase in stock price causes an increase in the value of a call option.

(ii) An increase in exercise price causes a decrease in the value of a call option.

(iii) An increase in the time to expiration causes an increase in the value of a call option.

(iv) An increase in the risk-free rate causes an increase in the value of a call option.

(v) An increase in variance of stock return causes an increase in the value of a call option.

Answer 16. (b)

Term loan to be raised	= Rs. 100 lakhs
Amount to be raised through Rights issue	= Rs. 100 lakhs
Total amount required for expansion project	= Rs. 200 lakhs
Rights price (including premium)	= Rs. 25
Number of rights shares to be offered	= Rs. 1,00,00,000 / 4,00,000 shares = Rs. 8

Therefore, one rights share to be offered for every one existing share.

Existing EPS	= Rs. 32,00,000 / 4,00,000 shares = Rs. 8
Price-earning ratio	= 7
Market price per share	= Rs. 8 × 7 = Rs. 56

$$\text{Value of right (R)} = \frac{P_0 - S}{N+1}$$

Where,

P_0 = Cum-rights market share price

S = Subscription price of rights share

N = Number of existing shares required for a rights issue

$$R = \frac{56-25}{1+1} = \text{Rs. } 15.50$$

Market value after rights issue

$$= \frac{NP_0+S}{N+1} = \frac{(1\times 56)+25}{1+1} = \frac{81}{2} = \text{Rs. } 40.50$$

Number of shares outstanding after rights issue = 8,00,000 shares

Market capitalization = Ex-rights price × No. of shares outstanding

= Rs. 40.50 × 8,00,000 = Rs. 3,24,00,000

Calculation of Net asset value per share after rights issue

	Rs.	Rs.
Paid up capital		80,00,000
Reserves and Surplus :		
Existing	1,80,00,000	
Premium rights issue	60,00,000	2,40,00,000
Networth of the company		3,20,00,000

Net asset value per share = Rs. 3,20,00,000 / 8,00,000 = Rs. 40 per share

Q. 17. (a) Abhishek Ltd. has a surplus cash of Rs. 90 lakhs and wants to distribute 30% of it to the shareholders. The Company decides to buyback shares. The Finance Manager of the Company estimates that its share price after repurchase is likely to be 10% above the buyback price, if the buyback route is taken. The number of shares outstanding at present is 10 lakhs and the current EPS is Rs. 3.

You are required to determine :

(a) The price at which the shares can be repurchased, if the market capitalization of the company should be Rs. 200 lakhs after buyback.

(b) The number of shares that can be repurchased.

(c) The impact of share repurchase on the EPS, assuming the net income is same.

(b) An analyst of BCK Securities Ltd. has made risk and return projections for the securities of Reliance, Hindalco, which are as follows :

Scenario	**Probability**	**Return on Reliance (%)**	**Return on Hindalco (%)**	**Market Return (%)**
4% GDP growth	**0.30**	**3**	**2**	**1**
6% GDP growth	**0.35**	**17**	**14**	**15**
8% GDP growth	**0.25**	**20**	**19**	**17**
10% GDP growth	**0.10**	**22**	**17**	**25**

It is felt the interest rate of 7 per cent on the 91-day T-Bills is a good approximation of the risk-free rate.

Requirement :

(i) Calculate the betas of Reliance and Hindalco and comment on your findings.

(ii) Find out whether the shares of Reliance and Hindalco are under priced or over priced.

Answer 17. (a)

(a) Calculation of Buyback Price if Market Capitalization should be Rs. 200 lakhs

Surplus cash available = Rs. 90 lakhs

Estimated share price after repurchase = 10% above the buyback price

Let market price of share after buyback be 'P'

Market capitalization

$$= 1.10 \text{ P} \left(10{,}00{,}00 - \frac{30\% \text{ of Rs. } 90{,}00{,}000}{\text{P}}\right)$$

$$= 11{,}00{,}000 \text{ P} - 29{,}70{,}000$$

Market capitalization rate after buyback is Rs. 2,00,00,000

Then,

$$11{,}00{,}0000 \text{ P} - 29{,}70{,}000 = 2{,}00{,}00{,}000$$

$$11{,}00{,}000 \text{ P} = 2{,}00{,}00{,}000 + 29{,}70{,}000$$

$$\text{P} = 2{,}29{,}70{,}000 / 11{,}00{,}000 = 20.88$$

$\therefore$ Buyback price is to be fixed at Rs. 20.88

(b) Number of shares to be bought back

= Rs. 27,00,000 / Rs. 20.88 = 1,29,310 shares

(c) Impact on EPS due to buyback

No. of equity shares outstanding after bought-back

= 10,00,000 – 1,29,310 = 8,70,690 shares

$$\text{EPS} = \frac{10{,}00{,}000 \times \text{Rs. } 3}{8{,}70{,}690} = \text{Rs. } 3.45$$

The EPS has increased from Rs. 3 to R$s. 3.45 after the shares are bought-back.

Answer 17. (b)

(i) Expected return of Reliance

$$E(R_R) = 0.30 \times 3 + 0.35 \times 17 + 0.25 \times 20 + 0.10 \times 22$$

$$= 11.95\%$$

Expected return of Market

$$E(R_M) = 0.30 \times 1 + 0.35 \times 15 + 0.25 \times 17 + 0.10 \times 25$$

$$= 12.30\%$$

$$\alpha_m^2 = 0.30 \times (1 - 12.3)^2 + 0.35\,(15 - 12.30)^2 + 0.25(17 - 12.3)^2 + 0.10(25 - 12.3)^2$$

$$= 38.307 + 2.55 + 5.522 + 16.129$$

$$= 62.508\ (\%)$$

$$\alpha_m = \sqrt{62.508}$$

$$= 7.906\%$$

Cov (Reliance, MKT)

$= 0.30\,(-14.05)(1 - 12.3) + 0.35(17 - 14.05)(15 - 12.30) + 0.25(20 - 14.05)(17 - 12.30)$
$+ 0.10(22 - 14.05)(25 - 12.30)$

$= 37.459 + 2.788 + 6.991 + 10.096$

$= 57.334\%$

β (Rel) $=$ Cov (Rel, MKT)/ α_m^2

$= 57.334/62.508$

$= 0.917$

Cov (Hind, MKT)

$= 0.30\,(2 - 11.95)(1 - 12.3) + 0.35(14 - 11.95)(15 - 12.3) + 0.25(19 - 11.95)(17 - 12.3)$
$+ 0.10(17 - 11.95)(25 - 12.3)$

$= 33.731 + 1.937 + 8.284 + 6.413$

$= 50.365\%$

β (Hind) $=$ Cov (Hind, MKT)/ α_m^2

$= 50.365/62.508$

$= 0.806$

Hence, both the stocks are defensive with a (β) less than unity (i.e. < 1).

(ii) The equation of Security Market Line (SML) is :

$R_j = R_f + (R_m - R_i)\,\beta$

Required rate of return of Reliance is

$R_{j(H)} = 7 + 0.917(12.3 - 7) = 11.86\%$

As required rate of return (11.86%) is < expected rate of return (14.05%), the share price of Reliance is undervalued.

Required Rate of Return of Hindalco is :

$R_{j(H)} = 7 + 0.806(12.3 - 7) = 11.27\%$

As required rate of return is less than the expected rate of return (11.27% < 11.95%), the share price of Hindalco is undervalued.

Q. 18. (a) What are the differences between merchant banks and commercial banks?

(b) The settlement price of June Nifty Futures contract on a particular day was 4585. The minimum trading on Nifty Futures is 100. The initial margin is 8% and the maintenance margin is 6%. The index closed the following levels on the next five days :

Day	**1**	**2**	**3**	**4**	**5**
Settlement price (Rs.)	**4,690**	**4,760**	**4,550**	**4,480**	**4,570**

Required :

(i) Calculate the mark to market cash flows and daily closing balances in the account of :

(A) an investor who has gone long at 4585

(B) an investor who has gone short at 4585

(ii) Calculate the net profit/(loss) on each of the contracts.

Answer 18. (a)

The differences between merchant banks and commercial banks are summarized below :

Merchant Banks	Commercial Banks
The area of activities of merchant bankers is "equity and equity related". They deal with mainly funds raised through money market and capital market.	Basically deal and debt related finance and their activities are appropriately arrayed around credit proposal, credit appraisal and loan sanctions.
The merchant bankers are management oriented. They are willing to accept risk of business.	Commercial banks are asset oriented and their lending decisions are based on detailed credit analysis of loan proposals and the value of security offered against loans. They generally avoid risks.
The activities of merchant bankers include project counselling, corporate counselling in areas of capital restructuring, amalgamations, mergers, takeover etc, discounting and rediscounting of short term paper in money markets, managing, underwriting and supporting public issues in new issue market and acting as brokers and advisers on portfolio management in stocks exchange. Merchant banking activities have impact on growth, stability and liquidity of money markets.	Commercial bankers are merely financiers.

Answer 18. (b)

Initial margin = 4,585 × 100 × 8/100 = Rs. 36,680

Maintenance margin = 4,585 × 100 × 6/100 = Rs. 27,510

The initial margin and maintenance margin are same for both long and short positions.

Margin Account of Investor who has gone long

Day	Settlement price	Opening balance	Mark to market C/F	Margin call	Closing balance
1	4,690	36,680	(+) 10,500*	–	47,180
2	4,760	47,180	(+) 7,000	–	54,180
3	4,550	54,180	(-) 21,000	–	3,180
4	4,480	33,180	(-) 7,000	10,500	36,680
5	4,570	36,680	(+) 9,000	–	45,680

* (4,690 – 4,585) × 100 = (+) 10,500

Profitability of Investor who has gone long

At the end of the 4th day Margin account will show (33,180 – 7,000) = 26,180 (less than maintenance margin). Hence Margin call, Net loss on the contract

= 47,180 – 45,680 = (–) 1,500

or

= 10,500 + 7,000 – 21,000 – 7,000 + 9,000 = (–) 1,500

Margin Account of Investor who has gone short (Rs.)

Day	Settlement price	Opening balance	Mark to market (C/F)	Margin call	Closing balance
1	4,690	36,680	(–) 10,500*	10,500	36,680
2	4,760	36,680	(–) 7,000	–	29,680
3	4,550	29,680	(+) 21,000	–	50,680
4	4,480	50,680	(+) 7,000	–	57,680
5	4,570	57,680	(–) 9,000	–	48,680

* (4,585 – 4,690) × 100 = (–) 10,500

Profitability of Investor who has gone short

At the end of the 1st day Margin Account will show (36,680 – 10,500) = 26,180 (less than maintenance margin). Hence Margin call,

Net loss on the contract

= 48,680 – 36,680 = Rs. 1,500

or

= – 10,500 – 7,000 + 21,000 + 7,000 – 9,000 = Rs. 1,500

Section II : Corporate Laws and Corporate Governance

Q. 19. Choose the most appropriate one from the stated options and write it down (only indicate A, B, C, D as you think correct) :

(i) Shareholders are empowerd to transfer their shares by

A. Section 82

B. Section 108

C. Section 77

D. Section 113

(ii) A report by the accountants on the profits or losses of the business should be included in the Prospectus for the preceding

A. 5 financial years

B. 5 accounting years

C. 3 financial years

D. 3 accounting years

(iii) Under Competition Act, 2002, penalty for offences in relation to furnishing of information is

A. Rs 5 lakh

B. Rs 10 lakh

C. Rs 25 lakh

D. Rs 50 lakh

(iv) In the context of Corporate Governance, Narayana Murthy Committee was formed in the year

A. 2002

B. 2003

C. 2004

D. 1999

(v) As per Section 205(1A) of the Companies Act, 1956 the amount of interim dividend shall have to be deposited from the date of declaration of such dividend in a separate bank account within

A. Three Days

B. Five Days

C. Seven Days

D. None of the above

(vi) A public Information Officer shall as expeditiously as possible provide information from the date of receipt of request but in any case within

A. 15 days

B. 30 days

C. 45 days

D. 60 days

(vii) Buy back of equity shares in a financial year shall not exceed

A. 25% of authorized capital

B. 25% of paid up capital

C. 25% of called-up capital

D. 25% of subscribed capital

(viii) Which of the following items requires special resolution in a general meeting under the Companies Act, 1956?

A. Issue of shares at discount

B. Adoption of Statutory Report

C. Appointment of Managing/ Whole-time Director

D. Reduction of Share Capital

(ix) A listed company is required to furnish to the Stock Exchange(s) unaudited financial results on a

A. Annual basis

B. Half-yearly basis

C. Quarterly basis

D. Monthly basis

(x) The Board may appoint additional directors only if it is authorized by

A. Memorandum of Association

B. Articles of Association

C. Company Law Board

D. Shareholders in the AGM

Answer 19.

(i) - A

(ii) - A

(iii) - B

(iv) - B

(v) - B

(vi) - A

(vii) - B

(viii) - D

(ix) - C

(x) - B

Q. 20. (a) Who is a Promoter?

(b) A company is not authorized by its memorandum of association to run a canteen but it is obliged to do so under Section 46 of the Factories Act, 1948. Under the facts and circumstances, should the company undergo the formalities of changing its objective clause?

(c) Can there be more than one or two main objects in the case of a new company to be formed, and if so, whether the Registrar could ask the subscribers to show him some material evidence to satisfy his as to whether the company on incorporation would be carrying on the objects stated as the main objects?

Answer 20. (a)

This term has not been defined under the Companies Act. The word Promoter is used in common parlance to denote any individual, syndicate, association, partnership or a company which takes all the necessary steps to create and mould a company and set it going. The promoter originates the scheme for the formation of the company; gets together the subscribers to the memorandum; gets memorandum and articles prepared, executed and registered; finds the bankers, brokers and legal advisors' locates the first directors, settle the terms of preliminary contracts with vendors and agreement with underwriters and makes arrangements for preparation, advertisement and circulation of the prospectus and placement of the capital.

However, the persons assisting the promoters by acting in a professional capacity do not thereby become promoters themselves. Thus, a solicitor who drafts the articles or the accountant who values assets of a business to be purchased are merely giving professional assistance to the promoter.

A person cannot, however, become a promoter merely because he signs the memorandum as a subscriber for one or more shares.

Answer 20. (b)

If the running of the canteen is incidental to the main object of the company, there is no necessity to amend the objects clause, but if the purpose is to earn profit, then the objects clause should contain enabling provision to carry on such business by suitably amending the memorandum in accordance with the law.

Answer 20. (c)

The meaning of the words "to be pursued by the company on incorporation" is pertinent. These words mean that the objects stated as the main objects are to be pursued by the company immediately after incorporation or within a reasonable time thereafter. The Registrar of Companies will be entitled to satisfy himself while registering a company that the objects intended to be the main objects clause were really the objects intended to be pursued by the company either immediately or within a reasonable time after its incorporation. For this purpose he might ask for certain documents, information or explanations, for example, correspondence or industrial licenses, or permissions or agreements with collaborators, vendors etc. This is important also because the Registrar appears to have no power after the incorporation of a company to question as to why the company has not pursued any particular objects stated to be one of the main objects.

Q. 21. (a) Document on which a company borrowed a sum of money was executed by the managing director, who was the chief functionary of the company and to comply with the requirements of the Articles the signatories of two other directors were forged. Can the company be allowed to deny liability under this document?

(b) Under Section 57 of the Companies Act, 1956, a prospectus cannot include a statement by an expert if he has been engaged or interested in the formation or promotion, or in the management of the company. Would a chartered accountant or a solicitor be deemed to be engaged in the formation or promotion of a company, if he had been engaged in preparation of memorandum and articles or financial or financial or collaboration schemes or such other things in relation to the formation of a company?

(c) The shares of Bright Ltd. are underwritten by the recognized underwriters. The underwriters having the risk, asked the management of Bright Ltd. to safeguard them. Bright Ltd. arranged with the sister concerns to provide guarantee to the underwriters. The information in respect of this arrangement is not disclosed in the prospectus issued by Bright Ltd. while inviting subscription from the public. Does this arrangement amount to mis-statement in the prospectus?

Answer 21. (a)

In Rubber v. Great Fingall Consolidated, Lord Loreburn held that protection under doctrine of indoor management could not be extended to cases of forgery. A transaction effected by forgery is rendered void ab initio for absence of consent and not voidable on ground of mere fraud. The rule of indoor management only covers the gap created by lack of authority. It cannot apply to transactions which are *void* or illegal *ab initio*.

However, in Sri Kishan v. Mondal Bros. & Co., it was held that a company may be held liable for fraudulent acts of its officers acting under their ostensible authority on its behalf. Thus, where a managing director practices a fraud on the company and does not place the money borrowed by him on behalf of the company with the company, the company cannot defeat a bona fide creditor's claim for recovery of the money on the ground of fraud of its own officers.

In the given problem, therefore, the company will not be allowed to deny liability on the document in question.

Answer 21. (b)

A chartered accountant or a solicitor engaged in the preparation of memorandum and articles of association of a company or any financial or collaboration scheme purely in their professional capacity without having any other stake would not considered either engaged or interested in the formation or promotion of a company as the purpose of this provision was that any expert opinion given in the prospectus should not be influenced by one's personal interest. Any statement by him in the capacity of an expert in the prospectus therefore, would neither vitiate the prospectus nor would amount to contravention of Section 57.

Answer 21. (c)

There was no mis-statement in the prospectus issued by Bright Ltd. as this would amount to a sub-underwriting arrangement with some other company. There was no statutory obligation to give particulars about sub-underwriting in the prospectus.

It was, however, felt that the company might be contravening Section 372 of the Companies Act in case shares were not fully subscribed and the sub-underwriters were asked to take the shares. It was also felt that if there was any consideration flowing from Bright Ltd., in respect of sub-underwriting, the arrangement would be hit by Section 77(2) of the Act.

Q. 22. (a) A company increased the authorized share capital by a special resolution. However, the notice in Form No. 5 was not filed with the Registrar of Companies nor the requisite fee paid on the increase. After two years, the earlier resolution raising the share capital was rescinded and share capital brought back to its original level. Whether the company committed any offence and, if so, was it a continuing offence?

(b) X, Y and Z hold jointly 100 shares in a company. They want the order of names changed in the share certificates as Y, X and Z and make an application for change and lodge the original share certificate. The company directed them to execute a proper instrument of transfer to effect the change. Is the company justified?

(c) The board of directors of M/s All India Leather Producers Association Ltd. have passed a resolution to the effect that no member who is indulging in activities detrimental to the interests of the company be permitted to examine the records or obtain certified copies thereof. A member of the company who is also a member of the Rival Association demands inspection of the register of members and minutes of general meetings and certified true copies thereof. The company refuses the inspection, etc., on the strength of the resolution referred to above. Examine the correctness of refusal by the company in the light of the provisions of the Companies Act and the remedial action, if any, that can be taken by the aggrieved member in this case.

Answer 22. (a)

According to Section 97 of the Companies Act, 1956 where a resolution has been passed increasing the share capital beyond the authorized capital, notice of increase in Form No. 5 must be given to the Registrar within 30 days after the passing of the resolution authorizing the increase. If any default is made in complying with this section, the company and every officer of the company who is in default shall be punishable with fine which extend to five hundred rupees for every day during the default continues.

The given facts are similar to the case of Amison Foods Ltd. v. ROC [1999] 1 Comp. LJ 115: [1999] 33 CLA 46 (Ker.) in which it was held that the failure to file with the Registrar of Companies Form No. 5 for giving notice of increase of capital within 30 days of passing of the resolution to increase capital is a continuing offence. A subsequent resolution to rescind the earlier resolution would not absolve any body of the duty to file notice and deposit requisite fee on the basis of the resolution as first passed. But, if the company has rescinded the resolution soon after it was passed without giving effect to or acting thereon, no fee need be paid.

Answer 22. (b)

As per the Companies Act, it is possible for two or more than two persons to hold shares jointly in a company. In that case all of them are not the individual members of the company. Instead, they are said to hold the shares jointly.

In case of joint shareholdings one or more of them may require the company to alter or rearrange the serial order of their names in the register of members of the company. In this process, there will be need for effecting consequential changes in the share certificates issued to them. Since no transfer of any interest in the shares takes place on such transposition, the question of insisting on filling transfer deed with the company may not arise.

A request signed by all the holders (in the existing order and also proposed order) is sufficient which the Board of directors can consider and effect transposition of names.

So, in the given case, the stand of the company is not justified.

Answer 22. (c)

According to the provisions contained in section 163 of the Companies Act, 1956, every member of the Company is entitled to inspect the register of members without payment of any fee. Even a non-member of the company can inspect the register of members on payment of prescribed fee. They can also ask for copies of extracts from the register of members on payment of the prescribed fee as copying charges. Similarly, as per section 196, the minutes books of the general meetings are also to be made available for inspection of the members of the Company without any charge. Thus, M/s All India Leather Producers Association Ltd. have no right to refuse the inspection of the register of members and minutes books of general meetings. The resolution passed by the said Association is not valid as it cannot go beyond the provisions of the Act. The aggrieved member has every right to approach the Company Lab Board under Section 163(6) and 196($) of the Companies Act. For this purpose the member has to file an application before CLB along with the prescribed application fee.

Q. 23. (a) Hameed, the chairman of a company, borrowed Rs. 10 lakhs from the State Bank of India, Patna, under a promissory note. A suit was filed for the recovery of debts on the basis of the promissory note executed by the chairman. The company refused to accept the liability on the plea that the chairman had borrowed funds without authorization form the company. Will the company succeed? Explain.

(b) The chairman at a Board meeting counts 5 votes in favour of 6 votes against the resolution. Can the chairman cast his own vote, which he had not exercised earlier, in favour of the resolution and also the casting vote which the articles of association authorise, and declare the resolution as passed?

(c) The company of which you are the secretary has adopted 1st April to 31st march as its financial year. The last annual general meeting of the company was held on 30.09.2009 to approve the accounts for the year 2008-09. The audit of the accounts for the year 2009-10 has not been completed. Your directors intend to hold the annual general meeting on 30.09.2010 to transact the business other than the consideration of the accounts for the year 2009-10 and to adjourn the meeting to a later date for the purpose of adoption of the annual accounts for 2009-10.

State whether intended procedure would be in order ? Comment on holding of the adjourned meeting on 31.01.2011, if the audit is completed in December 2010.

Answer 23. (a)

The facts given in the question are based on the case of Kumar Krishna Rohatgi v. State Bank of India [1980] 50 Comp. Cas. 722. IN this case, the company borrowed an amount of Rs. 5 lakhs from the State Bank of India under a promissory note guaranteeing the repayment by executing a guarantee in favour of the company. The promissory note was renewed from time to time. In suit for the recovery, the company contended that the promissory note was executed by the chairman without Board resolution authorizing him to execute the promissory note as required under section 292(1)(c) of the Companies Act, 1956. The Patna High Court held that in cases where the directors borrowed funds without proper authorization from the company and the amount borrowed was utilized for the benefit of the company, the company cannot then repudiate its liability to repay, since general law implied a promise to be paid by the principal when the money so borrowed by an agent had gone into the coffins of the principal. Hence, the principal had taken the benefits of the amount borrowed. Hence, the company's contention was rejected by the Patna High Court. Accordingly, the decision shall apply to the case in question *mutadis mutandis*.

Answer 23. (b)

As per Guidance Note on Meetings of the board of Directors issued by ICSI, a chairman does not have an inherent right to the casting vote nor it is a right given by the statute. It has to be conferred on the chairman by the articles. In the given case, the articles of the company authorize the chairman to cast his casting vote.

However, the guidance note provides that where the chairman chooses to exercise his vote as a director, he should do so before the voting is conducted. It also provides that a casting vote is a second or deciding vote. If the votes are divided unequally, the question of using a casting vote does not arise. It is only in the event of equality of votes, for and against, that the question of a casting vote assumes relevance.

Therefore, in the given case, the chairman cannot cast his own vote which he had not exercised earlier as the voting has concluded. Again, he cannot cast his casting vote as the votes are not divided equally.

Answer 23. (c)

According to section 210(3)(b), at every AGM of the company (except the first AGM) held in pursuance of section 166, the Board of Directors must place before the company a balance sheet and a profit and loss account for the period beginning with the day immediately after the period for which accounts were last submitted and ending with the day which shall precede the day of the meeting by not more than six months. Where extension of time has been granted by R.O.C. for holding meeting beyond six months, the financial accounts must be placed within the extension so granted.

Where accounts are not ready and available for being placed at an annual general meeting to be held within the time limit allowed by the Act for holding the meeting the usual practice is to hold the meeting within the statutory time limit, transact all the business other than the consideration of accounts and then adjourn the meeting by an appropriate resolution to a future date when the accounts will be ready but then adjourned AGM must be held within the statutory period (including the extension thereof, if any, allowed), as provided in section 166(1) and such adjournment cannot bypass the provisions of section 210 of the Act.

In view of the legal position stated above the intention of the directors to hold AGM for the year ending 31st March, 2010 on 30.09.2010 to transact the business other than consideration of accounts for the year 2009-10 and to adjourn the meeting t a later date for the purpose of adoption of the accounts is not violative of the provisions of section 166 read with section 210. Further, the adjourned meeting which is deemed to be a continuation of the earlier meeting must be finished within the statutory period of 9 months (including extension) prescribed under section 210. In other words, the adjourned meeting must also be completed by 31.12.2010.

In case the adjourned meeting is held on 31.1.2011, it shall be violative of section 210(3) of the Companies Act, 1956 and the delinquent directors would be liable for prosecution under section 210(5) and section 166.

Q. 24. (a) The paid up share capital of AJD Ltd. is Rs. 10 crores consisting of 70 lakhs Equity Shares of RS. 10 each, fully paid-up and 30 lakhs Preference Shares of Rs. 10 each, fully paid-up. Nationalized Banks, L.I.C. and I.D.B.I. hold among themselves 30 lakhs Equity Shares and 25 lakhs Preference Shares.

With reference to the provisions of the Companies Act, 1956, examine whether AJD Ltd. is a Government company. Explain the manner in which you would proceed in the matter of appointment of auditors for the said company.

(b) Directors of Sachin Ltd. are not holding any shares in Dhoni Ltd. Similarly directors of Dhoni Ltd. are not holding any shares in Sachin Ltd. But, wife of director 'S' of Sachin Ltd. holds 40% of the paid up share capital of Dhoni Ltd. Board of directors of Sachin Ltd entered into a contract with Dhoni Ltd. for purchase of goods and director 'S' did not disclose his indirect interest in Dhoni Ltd. Examine whether 'S' has violated any of the provisions of the Companies Act and also the validity of the contract.

(c) As scheme of amalgamation of company 'X' with company 'Y' was presented to the High Court for sanction after the scheme was approved by an overwhelming majority of shareholders and secured and unsecured creditors of both companies at meetings held under section 391.

While the scheme was pending in the High Court, some of the members requisitioned an extra-ordinary general meeting for the purpose of requesting Company 'X' to negotiate with Company 'Y' as according to the requisitionists the exchange ratio was not fair and reasonable. Can the directors refuse to call the extraordinary general meeting?

Answer 24. (a)

Section 617 defines a Government company to mean in which not less than 51% of the paid-up share capital is held by the Central Government, or any State Government (s) or partly by the Central Government and partly by one or more State Governments. Shareholdings of financial institutions and nationalized banks are not to be taken into account.

Therefore, AJD Ltd., is not a Government company.

However, as per section 619B for the purpose of appointment of auditors, shareholdings of nationalized banks and other named Institutions shall be taken into account. Thus, the auditor of AJD Ltd. shall be appointed in the same manner by the Comptroller and Auditor General of India (C&AG).

Answer 24. (b)

Section 297 does not apply to a contract between two public companies and therefore the present case in outside the purview of section 297. However, as per section 299, every director who is anyway, directly or indirectly, interested in a contract or arrangement shall disclose the nature of his interest. Following must be noted in this regard.

- Relationship of husband and wife, or father and son is capable of influencing the judgement of a person so that it is *prima facie* a matter of interest which must be disclosed. The interest need not be direct [*Pydah Venkatachalapathi v. Guntur Cotton, Jute and Paper Mills Co. Ltd. AIR 1929 Mad 353.]*
- If to the knowledge of a director, his relative is concerned or interested in a contract or arrangement, the director must disclose the same to the Board *[Fateh Chand Kad v. Hind Sons (Patiala) Ltd. (1957) 27 Comp Cas 340].*

Therefore, in view of the above judicial rulings, 'S' should disclose his interest since he is indirectly interested in the contract, as his wife is holding 40% of the paid up share capital of Dhoni Ltd. Failure to disclose the interest by 'S' amounts to non-compliance of section 299 and the following consequences shall follow :

- 'S' shall vacate the office of director held by him (Section 283)
- He shall be punishable with fine which may extend to Rs. 50,000 (Section 299)
- If 'S' acts as a director when he knows that the office of director held by him has become vacant on account of non-disclosure of interest, he shall be punishable with fine which may extend to Rs. 5,000 for each day on which he acts as a director (Section 283)
- The contract is not illegal, void or unenforceable. However, the company has an option to avoid the contract [*Amritsar Rayon and Silk Mills Ltd. v. Arirchand Saideh (1988) 64 Comp Cas 762*].

Answer 24. (c)

The facts in the problem are similar to the facts of Pavin Kantilal v. Rohini Ramesh save [1985] 57 Comp. Cas. wherein it was held that the Court cannot prevent a company from holding a requisitioned meeting for considering a proposed modification of a scheme which is already lying before the court for its sanction. The court has been given wide powers under section 392 to give directions or modify the compromise or arrangement for its proper working and that a mere discussion by shareholders of modifications at a properly requisitioned meeting would not affect either the scheme or the Court's powers.

Directors, therefore, cannot refuse to call the extraordinary general meeting requisitioned by the members in this case.

Q. 25. (a) The directors of a company held more than 75% shares in the company. The company was carrying on business of construction of roads. The directors acquired certain contracts in their own name in breach of trust and made profits for themselves. In the annual general meeting, they passed a resolution that the company had no interest in the contract. The minority shareholders filed a case against directors asking them to account for the profits. Discuss.

(b) Inefficient Construction Ltd. has gone into liquidation because of the inability of the company to pay its debts. During the course of winding up a proposal was put forward by the previous management to revive the working of the company through a scheme of arrangement between the company and its creditors. As per the scheme, all the creditors have to forego fifty per cent of their dues. Some of the creditors and shareholders have voiced their opposition to the said scheme. The company approaches you for advice. Discuss the steps that have to be taken by the company in this regard.

(c) An understanding has been reached among the manufacturers of cotton to control the price of cotton, but the understanding is not in writing and it is also not intended to be enforced by legal proceedings.

Examine whether the above understanding can be considered as an 'agreement' within the meaning of section 2(b) of the Competition Act, 2002.

Answer 25. (a)

The majority rule governs the internal management of the company. As such if any wrong is done to the company, the proper plaintiff to institute a suit is the company itself and the court would not interfere at the instance of the individual shareholders [Foss v. Harbottle (1843) 2 Hare 461]. However, if the majority misuses its powers to defraud or oppress the minority, an action can be brought by an individual member.

Three directors holding 75% of the share capital of the company used their positions as directors and obtained a contract in their own names. As it amounted to breach of duty towards the company, they called a general meeting in which a resolution was passed to the effect that the company had no interest in the contract. It was held that directors utilized the contract belonging to the company for their personal gain and it amounted to a fraud on the minority. The company could claim profits realized by the directors [Cook Deeks (1916) 1 AC 554].

The facts of the given case are identical to the facts specified in the above case and so it can be said that the minority shareholders will succeed.

Answer 25. (b)

As per the provisions contained in section 517 of the Companies Act, 1956. M/s. Inefficient Construction Ltd. can enter into a scheme of arrangement with the creditors, even though the company is in liquidation. According to the said section, the scheme of arrangement will be binding on the company and its creditors provided : (i) it has been approved by a special resolution of the company; and (ii) agreed to by three fourths in number and value of the creditors. Any creditor or contributory may, however, within three weeks from the completion of the arrangement appeal to the Court and the Court may amend, vary, confirm or set aside the arrangement. The company should take the following steps in this regard :

(i) To get the draft scheme of arrangement approved by the Board of Directors.

(ii) To apply to the Court for directions to convene the meetings of the members/ creditors.

(iii) To hold the general meeting and pass the required special resolution.

(iv) To move the High Court for approval of the scheme.

(v) On receipt of the court's order, to file the certified copy of the order with the Registrar of Companies.

Answer 25. (c)

As per section 2 (b), 'agreement' includes any arrangement or understanding or action in concert –

(i) Whether or not, such arrangement, understanding or action is formal or in writing; or

(ii) Whether or not such arrangement, understanding or action is intended to be enforceable by legal proceedings.

In the given case, the understanding reached among the manufacturers of cotton to control the price of cotton shall amount to an 'agreement' as defined under section 2 (b) notwithstanding the fact that –

(i) Such an understanding is not in writing; and

(ii) Such an understanding is not intended to be enforced by legal proceedings.

Q. 26. (a) Fast Ltd. has a paid up capital of Rs. 200 lakhs and Reserves and Surplus of Rs. 400 lakhs. It has already entered into the following transactions :

Loan to D Ltd.	**100 lakhs**
Investment in E Ltd.	**40 lakhs**
Investment in F Ltd.	**100 lakhs**
Investment M Ltd.	**50 lakhs**
Investment in G Ltd.	**50 lakhs**

Examine the following proposals in the light of the provisions of the Companies Act, 1956.

(i) To invest in the shares of E Ltd. to the extent of Rs. 40 lakhs being the 1:1 rights offer made by that company.

(ii) Giving of a loan of Rs. 16 lakhs to P Ltd.

(iii) To give a guarantee for Rs. 10 lakhs to the Indian Bnak Ltd., in respect of a loan to be granted to H Ltd., a company in the same group.

(iv) To invest in the shares of D Ltd., to the extent to Rs. 50 lakhs.

Note : The transactions are in chronological order and are to be considered cumulatively.

(b) Mr. Ramchandra is holding the post of Director in five companies out of which Sunshine Ltd. is one. For the financial year ended on 31st March 2010, Sunshine Ltd. failed to pay interest on loans taken from a financial institution and also failed to repay the matured deposits. On 1st july 2010, Mr. Ramchandra accepting the post of Additional director in Elite Ltd., submitted a declaration that the disqualification specified in Section 274 of the Companies Act, 1956 is not applicable in his case. Decide whether the declaration submitted by Mr. Ramchandra to Elite Ltd. is in order.

(c) Critically discuss the role of stakeholders in corporate governance.

Answer 26. (a)

Calculation of limits :

Note 1 : (a) 60% of paid up capital and free reserves

60% of (Rs. 200 lakhs + Rs. 400 lakhs)

60 % of Rs. 600 lakhs = Rs. 360 lakhs

(b) 100% of free reserves = Rs. 400 lakhs.

Limit under section 372 (A) is the higher of (a) or (b) i.e. Rs. 400 lakhs.

Note 2 : Value of transactions already entered into is Rs. 340 lakhs

(i) The proposed investment in the shares of E Ltd., to the extent of RS. 40 lakhs is in response to a 1:1 rights offer from that company. The provisions of section 372 A do not apply to investments made in rights shares in pursuance of section 81 (1) (a). Therefore the company can proceed with the transaction. Remember, unanimous consent of Board is not required.

(ii) At this stage the value of the transaction is Rs. 380 lakhs. Investments in rights shares shall be included for computing value of investments for subsequent transactions. It is only the occasion of rights that is exempted and not the shares themselves. The proposed transaction i.e., loan of Rs. 16 lakhs to P Ltd., will take the value of the transactions to Rs. 396 lakhs, which is below the ceiling limit of Rs. 400 lakhs. Therefore, the company shall comply with the procedure discussed under section 372 A.

(iii) The value of the transactions at this stage is RS. 396 lakhs. The proposal to give a guarantee of Rs. 10 lakhs would take the value of the transactions to Rs. 406 lakhs and will normally require a previous sanction by way of special resolution. But, if exceptional circumstances exist that prevent the company from obtaining previous sanction by special resolution, then the board may give guarantee without previously authorized by a special resolution.

(iv) The value of transactions at this stage is Rs. 406 lakhs, which is above the limits prescribed. The proposed investment in shares of D Ltd., may be made after passing a special resolution in a general meeting and filling of Form 23 within 30 days of the date of passing the resolution.

Answer 26. (b)

As per section 274 (1)(g), a director of a public company shall be disqualified from being appointed as a director in any other public company, if the public company of which he is already a director –

(i) Does not file the annual accounts and annual returns for any continuous 3 financial years commencing on and after 1.4.1999; or

(ii) Fails to repay its deposit or interest thereon on due date or redeem its debentures on due date or pay dividend and such failure continues for 1 year or more .

In the present case, Sunshine Ltd. has committed the following defaults :

(i) Failure to pay interest on loans taken from a financial institution for the financial year ended on 31st March, 2010.

However, such failure does not attract the disqualification under section 274(1)(g), since the disqualification is incurred only if the default relates to payment of 'public deposits', and not on non-payment of interest on 'loans' obtained from a financial institution.

(ii) Failure to repay the matured deposits on due date for the financial year ended on 31st March, 2010.

Default in payment of matured deposits or interest thereon would result in applicability of section 274(1)(g) only if such default continues for 1 year or more. In the absence of any information, it may be assumed that such default has not continued for 1 year, as on 1st July, 2010.

Accordingly, none of the directors of Sunshine Ltd. are disqualified under section 274 (1)(g). Hence, Mr. Ramchandra can be appointed as an additional director of Elite Ltd. on 1st July 2010, and so the declaration given by Mr. Ramchandra is in order.

Answer 26. (c)

The corporate governance framework should recognize the rights of stakeholders as established by law and encourage active co-operation between corporations and stakeholders in creating wealth, jobs and the sustainability of financially sound enterprises.

(i) The corporate governance framework should assure that the rights of stakeholders that are protected by law are respected.

(ii) Where stakeholder interests are protected by law, stakeholders should have the opportunity to obtain effective redress for violation of their rights.

(iii) The corporate governance framework should permit performance-enhancing mechanisms for stakeholder participation.

(iv) Where stakeholders participate in the corporate governance process, they should have access to relevant information.

Q. 27. (a) What do you understand by the expression 'corporate governance'?

(b) Define 'competent authority' under Right to Information Act 2004.

(c) The paid –up share capital of ABC Ltd. is Rs. 5 lakhs consisting of 50,000 equity shares of Rs. 10 each fully paid-up. Certain members of the company holding the following shares requisitioned an extraordinary general meeting on 1.2.2010 :

A - 2,250 shares

B - 2,000 shares including 500 bonus shares

C - 1,000 shares including 500 right shares

The directors have failed to call the meeting on the pretext that the articles have not permitted the same. What is the course of action open to the aforesaid members?

Answer 27. (a)

The Cadbury Committee Report (1991) defines corporate governance as 'a system by which the corporate are directed and controlled'.

Corporate governance means the idea of ensuring proper management of companies through the institutions and mechanisms available to the shareholder. According to Kumarmangalam Birla, the principal objective of good corporate governance is to enhance shareholder value.

A system of good corporate governance focuses on the relationship of accountability between the principal actors of sound financial reporting – the Board, the Management and the Auditor. It holds the management accountable to the board, and the board accountable to the shareholders, and in the process audit acts as a catalyst for effective financial reporting.

Good corporate governance should ensure :

(i) Clear responsibilities and functional authorities.

(ii) Precise distinction between direction and management, and

(iii) Total transparency in respect of all actions of management.

Answer 27. (b)

"Competent authority" means-

(i) The Speaker in the case of the House of the People or the Legislative Assembly and the Chairman in the case of the Council of States or the Legislative Council ;

(ii) The Chief Justice of India in the case of the Supreme Court;

(iii) The Chief Justice of the High Court in the case of a High Court;

(iv) The President or the Governor, as the case may be, in case of other authorities created by or under the Constitution;

(v) The administrator appointed under article 239 of the Constitution;

Answer 27. (c)

Section 169 of the Companies Act, 1956 provides that the Board of directors of a company must call an extraordinary general meeting if required to do so by members holding, on the date of deposit of the requisition, not less than one tenth of such of the paid up share capital as carries the right to vote in regard to the matter proposed for consideration.

Here the total share capital held by the requisitionists amounts to Rs. 52,500 and exceeds one tenth of the total of Rs. 5 lakhs as on the date of requisition on 1.2.2010. Bonus and rights shares are at par with ordinary shares and are to be included in arriving at the eligible value.

Therefore, the requisition is a valid one.

When the requisition is deposited at the registered office of the company, the director should within 21 days, move to call a meeting to be held within 45 days from the date of lodgement of the requisition. If the directors fail to do so, the requisitionists representing either a majority in value of the paid-up share capital held by all of them or not less than one tenth of the paid up share capital carrying voting power in regard to the matter proposed, whichever is less, may themselves proceed to call the meeting within 3 months from the date of the requisition, and claim the necessary expenses from the company. It should be noted that the Articles of Association cannot take away from members this right of requisitioning.

Q. 28. (a) In A Board meeting, a few directors raise disagreements on the minutes of the earlier Board meeting alleging that the decisions were recorded wrongly. Advise the chairman.

(b) A charge in favour of a public financial institution created by a public company to secure a sum of Rs. 150 crore was not created within the statutory period and the Company Law Board on an application made by the company did not grant the extension of time. Is it possible to revive the said charge?

(c) A group of shareholders of Mismanaged Ltd. filed an application before the Company Law Board (CLB) alleging various acts of fraud and mismanagement by Mr. Goldfish, the Executive Director & his associates. During the course of hearing before the CLB, the authorized representative of the said company contended that the alleged transactions had taken place several years ago and the company has already removed the Executive Director, who was responsible for such transactions and hence there is no case before the CLB to interfere in the working of the company. Against the submissions on behalf of the company, the applicants submitted that although the fraudulent transactions were done in past and the Executive Director has been removed, but the company is still controlled by the persons, who are in league with the erstwhile Executive Director and are working as his henchmen.

State the merits of the applicants' arguments and the powers of the CLB.

Answer 28. (a)

The provisions relating to minutes of Board meeting are contained in sections 193 to 195. As per section 193, minutes of Board meeting shall be signed by the chairman of the same meeting or chairman of the next succeeding meeting.

The chairman has an absolute discretion in regard to the inclusion or non-inclusion of any matter in the minutes. If minutes have been drafted by the secretary but have not been signed, any alteration may be made in the minutes by the chairman. Such alteration does not require passing of any board resolution or consent of any of the directors.

However, if minutes have already been signed but certain directors raise disagreements on the minutes, the proper course is to pass a fresh resolution modifying the earlier resolution recorded in the minutes. The old minutes shall not be deleted or crossed out [Re Cawley and Company, (1889) 42 Ch. D 209].

In the given case it is not clear whether the minutes have already been signed by the chairman or not (since minutes of a Board meeting can be signed even after the conclusion of succeeding Board meeting). If the minutes have not been signed, the chairman may, after considering the objections of the directors, make alterations in the minutes drafter by the secretary. However, if the minutes have already been signed, then the chairman should allow the moving of a motion, for passing a fresh resolution modifying the earlier resolution. Such subsequent resolution would make the earlier resolution inoperative.

Answer 28. (b)

Section 125 provides that every charge created by a company to which the section applies shall so far as any security on the company's property or undertaking is conferrer thereby, be void against the liquidator and any creditor of the company, unless the prescribed particulars of the charge, together with the instrument, if any, by which the charge is created or evidenced or a verified copy thereof are filed with the Registrar of Companies within 30 days of its creation. However, on sufficient cause been shown, the Registrar may allow such filling within thirty days next following the expiry of the said 30 days, with additional fees. Section 637B of the Act provides that where any document which is required to be filed with the Registrar under any provision of this Act is not filed within the time specified therein, the Central Government may for reasons to be recorded in writing condone the delay. However, under section 141, the Company Law

Board has been vested with discretionary powers to condone the delay in filing the particulars of charge, or modification or satisfaction thereof in the prescribed time. In view of the specific provisions contained in section 125 and power given to CLB for condonation of delay under section 141, the Central Government cannot exercise its power under section 637B. As the Company Law Board in the present case has not granted extension, the charge stands as void and cannot be revived. A new charge may, however, be created.

Answer 28. (c)

The powers of the CLB under section 397 and section 398 can be invoked for obtaining relief from oppression and mismanagement only where the affairs of the company are being conducted in a manner oppressive of any member or members or in a manner prejudicial to the interest of the company.

The words 'are being conducted' would indicate that oppression and mismanagement should be a continuous course of conduct and should be present on the date of the application to the CLB. Thus the CLB does not have power to interfere with past and concluded transactions entered into by a company. At best, the CLB can exercise its power to set aside any transfer of property effected within 3 months before the date of the application. Further the CLB can exercise the power conferred by Section 406 to direct the delinquent directors, managers and other officers to refund any funds of the company that they have retained or misapplied or pay compensation for loss arising on account of misfeasance or breach of trust. As the applicants have not established the above facts beyond a vague statement that the management of the company is still controlled by the henchmen of Mr Goldfish, the CLB will not exercise its powers under the Act. This view is supported by the decision in Seth Mohanlal Ganpatram v. Shri Satyaji Jubilee Cotton and Jute Mills Company Ltd. (1964) 34 Comp. Cas. 777.

Q. 29. (a) A public limited company forfeited 90 equity shares and re-issued the same which resulted in earning a surplus of Rs. 5,000. The company did not file return of allotment with the Registrar of Companies in respect of re-issued shares. Explain whether the company has contravened any provision of the Companies Act, 1956 by non-filing of the return.

(b) Examine the extent to which the legal representatives of a deceased director against whom misfeasance proceedings were initiated by the liquidator of the company, under the Companies Act, 1956, can be held liable.

(c) A transfer deed was presented in which the amount of stated consideration was lower than the prevailing market value of the shares of Bright Ltd., a listed company. The transfer deed was otherwise in order and the stamp duty was paid in accordance with the prevailing market value. Advise the company.

Answer 29. (a)

No, the public company has not contravened any provisions of the Companies Act, 1956. No return of allotment of the shares re-issued to be filed with the Registrar. Such re-issue in fact cannot be called allotment. According to the provisions of section 75(5) of the Act, forfeited shares can be further re-issued at a premium without any legal formalities. The issue of forfeited shares is treated as a sale and not as allotment of shares.

Answer 29. (b)

Under section 543, the court has the power to initiate misfeasance proceedings against any delinquent director or any other officer of the company.

The Supreme Court has held that misfeasance proceedings initiated under section 543 against a director of a company in winding up can be continued on his death against his legal heirs for the purpose of determining and declaring the loss or damage caused to the company. The amount declared to be due in the misfeasance proceedings shall be realized from the estate of the deceased in the hands of his legal representatives [Official Liquidator v. Parthasarathi Sinha (1983) 53 Comp Cas 163 (SC)]. However, such liability shall not extend to any sum beyond the value of the estate of the deceased in their hands.

Answer 29. (c)

Section 108 of the Companies Act, 1956 provides that a company shall not register a transfer of shares in or debentures of the company, unless a proper instrument of transfer duly stamped and executed by or on behalf of the transferor and by or on behalf of the transferee and specifying the name, address and occupation, if any of the transferee, has been delivered to the company along with the certificates of shares/ debentures on the letter of allotment. Also section 111A of the Act provides that the shares or debentures or any interest therein of a public company shall be fully transferable. A transfer deed shall be deemed to be duly stamped if the stamp duty has been paid by affixing and cancelling special adhesive stamps bearing the inscription 'share transfer'. The duty will have to be calculated with reference to the market value of the share on the date of the transaction. In the present case, the deed being in order and duly stamped, the instrument of transfer cannot be rejected simply because the consideration stated is below market price; as the stamp duty is paid based on the market price. Thus, it is advisable to register the transfer, if it is otherwise in order.

Q. 30. (a) Examine with reference to the relevant provisions to the Competition Act, 2002 whether a person purchasing goods not for personal use, but for resale can be considered as a 'consumer'.

(b) The Articles of Association of a company fixed 3 as the quorum for a meeting of the Board. At a meeting of the Board, all the 5 directors were present. They allotted the shares of the company to 3 of the directors. Is it valid?

(c) Whether grant of shares by Company to its wholetime Director free of cost or at a discount to market price under a duly sanctioned ESOP scheme of the company amount to increase in the remuneration of the wholetime Director?

Answer 30. (a)

The given problem relates to section 2 (f) of the Competition Act, 2002.

As per section 2 (f) 'consumer' means any person who –

(i) Buys any goods for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any user of such goods other than the person who buys such goods for consideration paid or promised or partly paid or partly promised, or under any system of deferred payment when such use is made with the approval of such person, whether such purchase of goods is for resale or for any commercial purpose or for personal use ;

(ii) Hires or avails of any services for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any beneficiary of such services other than the person who hires or avails of the services for consideration paid or promised, or partly paid and partly promised, or under any system of deferred payment, when such services are availed of with the approval of the first-mentioned person whether such hiring or availing of services is for any commercial purpose or for personal use.

Thus, a person who purchases goods for resale or for any commercial purpose (and not for personal use) is also a 'consumer'.

Answer 30. (b)

The provisions in regard to quorum for a Board meeting are contained in section 287 of the Companies Act, 1956. It is provided therein that the quorum for a Board meeting shall be one-third of the total number of directors of a company (any fraction contained in that one-third shall be rounded off as one) or two directors whichever is higher. It is further provided that where at any time the number of interested directors exceeds or is equal to two-thirds of the total strength, the number of disinterested directors present at the meeting being not less than two shall form the quorum. The company is, however, free to fix a higher quorum for the Board meeting.

Viewed in the context of the above provisions, the company has fixed the quorum for a Board meeting at 3. In this case, out of five directors present at the meeting, the number of interested directors is three. As such, the remaining two directors who are not interested do not constitute a quorum and hence the meeting cannot be validly convened. Therefore, the allotment of shares at the aforesaid meeting is not valid.

The proviso to section 287(2) cannot also be availed of as the interested directors, who are three, are not equal to or more than two-thirds of the total strength of directors. The figure representing two-thirds will be 4 by rounding off fraction, if any. Hence, it can be assumed that the allotment made at the Board meeting will not be valid.

Answer 30. (c)

The grant of shares under Employees Stock Options Scheme does not entail any cash outgo from the Company. Hence, such shares cannot be deemed to have increased the remuneration of a wholetime director. Since the company does not incur an expenditure in allotting the shares it will not come within Explanation (b) of Section 198 and will not be a perquisite or remuneration.

FINAL EXAMINATION

(REVISED SYLLABUS - 2008)

GROUP - III

Paper-12 : FINANCIAL MANAGEMENT & INTERNATIONAL FINANCE

Q. 1. (a) For each of the questions given below, one out of four answers is correct. Indicate the correct answer and give your workings/ reasons briefly.

(i) The Traditional view of financial management looks at :

A. Arrangement of short-term and long-term funds from financial institutions.

B. Mobilisation of funds through financial instruments

C. Orientation of Finance function with Accounting function

D. All of the above

(ii) A firm seeks to increase its current ratio from 1.5 before its closing date of the accounts. The action that would make it possible is :

A. Delaying payment of salaries

B. Increase charge for depreciation

C. Making cash payment to creditors

D. Selling marketable securities for cash at book value.

(iii) The dividends distributed to the shareholders and taxes paid during the year are shown as application of funds when provision for dividends and provision for taxes are treated as :

A. Current liabilities

B. Non-current liabilities

C. Fund items

D. Non-fund items

(iv) In using debt-equity ratio in capital structure decisions, there is an optimal capital structure where :

A. The WACC is minimum

B. The cost of debt is lowest

C. The cost savings are highest

D. The marginal tax benefit is equal to marginal cost of financial distress

(v) Where the firm has sufficient profits from its existing operations, the loss on the new project will :

A. Cause overall loss

B. Reduce the overall taxation liability

C. Increase WACC

D. Increase cost of debt

(vi) Buying and selling call and put option with different strike prices and different expiration dates are called :

A. Butterfly spread

B. Diagonal spread

C. Vertical spread

D. Short hedge

(vii) 'Straddle' as a type of option trading means :

A. One call, one put, same security, same strike and same period

B. One call, one put, same security, different strike price and same period

C. One call, two puts, same security, same strike price and same period

D. None of the above.

(viii) Which of the following is/are basic precondition/s for interest arbitrage theory?

A. Free capital mobility

B. No taxes

C. No government restrictions on borrowing in foreign currency

D. All of the above

(ix) Global Depository Receipts (GDR) are issued to :

A. Investors of India who want to subscribe to shares of foreign companies

B. Only to persons of Indian origin residing in a foreign country

C. Non resident investors against publicly traded shares of the issuing companies and denominated in US dollars.

D. Foreign banks as security to raise foreign currency loans.

(x) If the amount and timing of a foreign currency outflow are both uncertain, then the best hedging technique will be to :

A. Buy a put option

B. Buy a call option

C. Sell a call option

D. Buy a forward contract

Q. 1. (b) In each of the questions given below, one out of four is correct. Indicate the correct answer.

(i) Vishnu Steels Ltd. Has issued 30,000 irredeemable 14% debentures of Rs. 150 each. The cost of floatation of debentures is 5% of the total issued amount. The company's taxation rate is 40%. The cost of debentures is :

A. 8.95%

B. 7.64%

C. 9.86%

D. 8.84%

(ii) The balance sheet of ABC Ltd. Shows the capital structure as follows :

2,50,000 equity shares of Rs. 10 each; 32,000, 12% preference shares of Rs. 100 each; general reserve of Rs. 14,00,000; securities premium account Rs. 6,00,000; 25,000, 14% fully secured non-convertible debentures of Rs. 100 each.; term loans from financial institutions Rs. 10,00,000.

The leverage of the firm is :

- A. **67.2%**
- B. **62.5%**
- C. **59.8%**
- D. **56.3%**

(iii) A company has obtained quotes from two different manufacturers for an equipment. The details are as follows :

Product	Cost (Rs. Million)	Estimated life (years)
Make X	4.50	10
Make Y	6.00	15

Ignoring operation and maintenance cost, which one would be cheaper? The company's cost of capital is 10%.

[Given : PVIFA (10%, 10 years) = 6.1446 and PVIFA (10%, 15 years) = 7.6061]

- A. **Make X will be cheaper**
- B. **Make Y will be cheaper**
- C. **Cost will be the same**
- D. **None of the above**

(iv) According to the second method of lending by a bank as per Tandon committee suggestion, the maximum permissible bank borrowing – based on the following information is :

Total current assets Rs. 40,000; Current assets other than bank borrowings Rs. 10,000; Core current assets Rs. 5,000.

- A. **Rs. 22,500**
- B. **Rs. 20,000**
- C. **Rs. 16,250**
- D. **Rs. 18,500**

(v) ABC Ltd. Is selling its products on credit basis and its customers are associated with 5% credit risk. The annual turnover is expected at Rs. 5,00,000 if credit is extended with cost of sales at 75% of sale value. The cost of capital of the company is 15%. The net profit of the company is :

- A. **Rs. 1,25,000**
- B. **Rs. 77,670**
- C. **Rs. 88,430**
- D. **Rs. 1,10,500**

(vi) The following various currency quotes are available from a leading bank :

Rs./£	75.31/75 .33
£ / $	0.6391/0.6398
$ /¥	0.01048/0.01052

The rate at which yen (¥) can be purchased with rupees will be

- A. **Re. 0.5070**
- B. **Rs. 1.5030**
- C. **Rs. 1.7230**
- D. **None of the above.**

(vii) Ms. S buys 10000 shares of RR Ltd. at Rs. 50 and obtains a complete hedge of shorting 400 Nifties at Rs. 2200 each. She closes out her position at closing price of next day at which point the share of RR Ltd. has dropped 2% and the Nifty future has dropped 1.5% . What is the overall profit/(loss) of this set of transaction?

A. Gain Rs. 3200

B. Gain Rs. 2200

C. Loss Rs. 3200

D. Loss Rs. 2200

(viii) An Indian company is planning to invest in US. The US inflation rate is expected to be 3% and that of India is expected to be 8% annually. If the spot rate currently is Rs. 45/US$, what spot rate can you expect after 5 years?

A. Rs. 59.09/US$

B. Rs. 57.00/US$

C. Rs. 57.04/US$

D. Rs. 57.13/US$

(ix) The stock of Pioneer company sells for Rs. 120. The present value of exercise price and the value of a call option are Rs. 108.70 and RS. 19.80 respectively. Hence the value of the put option is :

A. Rs. 8.50

B. Rs. 9.00

C. Rs. 10

D. Zero

(x) The spot and 6 months forward rates of L in relation to the rupee (Re/L) are Rs. 77.92542/ 78.1255 and Rs. 78.8550/78.9650 respectively. What will be the annualized forward margin (premium with respect to Ask price)?

A. 2.31%

B. 2.15%

C. 1.80%

D. 1.59%

Answer 1. (a)

(i) D. All of the above.

(ii) C. Making cash payment to creditors.

(iii) B. Non-current liabilities

(iv) D. The marginal tax benefit is equal to marginal cost of financial distress.

(v) B. Reduce the overall taxation liability.

(vi) B. Diagonal spread.

(vii) A. One call, one put, smae security, same strike and same period.

(viii) D. All of the above.

(ix) C. Non resident investors against publicly traded shares of the issuing companies and denominated in US dollars.

(x) B. Buy a call option.

Answer 1. (b)

(i) (D) 8.84%

	Rs.
Total issued amount (30,000 × Rs. 150)	45,00,000
Less : Floatation cost (Rs. 45,00,000 × 5/100)	2,25,000
Net proceeds from issue	42,75,000

Annual interest charge = Rs. 45,00,000 × 14/100 = Rs. 6,30,000

$$K_d = \frac{I(1-t)}{NP} = \frac{6,30,000\,(1-0.40)}{42,75,000} = 0.0884 \text{ or } 8.84\%$$

(ii) (C) 59.8%

Fixed income funds = Preference share capital + Debentures + Term loans

= Rs. 32,00,000 + Rs. 25,00,000 + Rs. 10,00,000 = Rs. 67,00,000

Equity funds = Equity share capital + General reserve + Securities premium

= Rs. 25,00,000 + Rs. 14,00,000 + Rs. 6,00,000 = Rs. 45,00,000

Total funds used in the capital structure

= Rs. 67,00,000 + Rs. 45,00,000 = Rs. 1,12,00,000

$$\text{Leverage} = \frac{\text{Rs. } 67,00,000}{\text{Rs. } 1,12,00,000} \times 100 = 59.8\%$$

(iii) (A) Make X will be cheaper

Make X

Purchase cost = Rs. 4.50 million

Equivalent annual cost = 4.50/6.1446 = Rs. 0.73235

Make Y

Purchase cost = Rs. 6.00 million

Equivalent annual cost = 6.00/7.6061 = Rs. 0.78884 million

Therefore, equivalent annual cost of make X is lower than make Y, make X is suggested to purchase.

(iv) (B) Rs. 20,000

MPBF under second method

= (75% current assets) – (Current liabilities other than bank borrowings)

= (Rs. 40,000 x 75/100) – Rs. 10,000 = Rs. 20,000

(v) (B) Rs. 77,670

Profitability of credit sales			**(Rs.)**
Credit sales			5,00,000
Less : Cost of sales (Rs. 5,00,000 x 75/100)			3,75,000
			1,25,000
Less : Cost of granting credit			
Default risk	(Rs. 5,00,000 x 5/100)	25,000	
Opportunity cost	(Rs. 5,00,000 x 60/365 x 15/100)	12,330	
Administration cost	(Rs. 5,00,000 x 2/100)	10,000	47,330
Net profit			77,670

(vi) (A) Re. 0.5070

To purchase (¥) we need to have a quote of (¥) in terms of Rs. We need only the ASK quote.

ASK (Rs. / ¥) = ASK (Rs./ £) * ASK (£ /$) * ASK($/ ¥)

= 75.33*0.6398 * 0. 01052

= Rs. 0.5070 (approx.)

(vii) (A) Gain Rs. 3,200

	Value of bought shares	Value of short future
Today's valuation	50 × 10000 = Rs. 5.00 lac	400 × 2200 = Rs. 8.80 lac
Next day's valuation	49 × 10000 = Rs. 4.90 lac	400 × 2167 = Rs. 8.668 lac
Gain /(loss)	2% dropped = Rs. 0.10 lac	1.5% dropped = Rs. 0.132 lac

Net Gain = Rs. 0.13200 – Rs. 0.1000 lac = Rs. 3200/-.

(viii) (C) Rs. 57.04/US$

According to Purchase Power Parity, spot rate after 5 years

= Rs. 45 × $[(1 + 0.08)/ (1 + 0.03)]^5$ = 45 × 1.2675 = Rs. 57.04

(ix) (A) Rs. 8.50

Value of put option = Value of call option + PV of exercise price – Stock price

= Rs. 19.80 + RS. 108.70 – Rs. 120

= Rs. 8.50

(x) (B) 2.15%

The forward margin (premium with respect to Ask price) rate :

$$= \frac{F - S}{S} \times \frac{12}{n} \times 100$$

$$= \frac{78.9650 - 78.1255}{78.1255} \times \frac{12}{6} \times 100 = 2.1491\% \text{ or } 2.15\%$$

Q. 2. Write short notes on :

(i) Marking to market

(ii) Cross border leasing

(iii) 'Financial Engineering'

(iv) Forward to forward contracts

(v) Economic value added

Answer 2.

(i) **Marking to market** – Marking to market is a characteristic feature of future contracts. Future contracts are standardized contracts that trade on organized future markets.

Under a future contract the seller agrees to deliver to the buyer a specified quantity of security, commodity or foreign exchange at a fixed time in future at a price agreed to at the time of entering into the contract. To ensure that default risk is reduced to minimum, both parties are required to deposit some margin money with the organized clearing house, which is known as the initial margin. Further, with the fluctuation in the price of the underlying asset, the balance in the margin account may fall below specified minimum level or even become negative so that it may not happen like this, at the end of each trading session, all outstanding contracts are appraised at the settlement price of that session. This is known as Marking to Market.

This would mean that some participants would make a loss while others would stand to gain. The exchange adjusts this by debiting the margin accounts of those members who made a loss and crediting the accounts of those members who have gained. A member making a loss must make good loss and the counter party will receive his profit.

Thus the value of the future contracts is set to zero at the end of each trading day.

(ii) Cross border leasing – Cross-border leasing is a leasing agreement where lessor and lessee are situated in different countries. This raises significant additional issues relating to tax avoidance and tax shelters. It has been widely used in some European countries, to arbitrage the difference in the tax laws of different countries.

Cross-border leasing have been in practice as a means of financing infrastructure development in emerging nations. Cross-border leasing may have significant applications in financing infrastructure development in emerging nations – such as rail and air transport equipment, telephone and telecommunications, equipment, and assets incorporated into power generations and distribution systems – and other projects that have predictable revenue streams.

A major objective of cross-border leases is to reduce the overall cost of financing through utilization by the lessor of tax depreciation allowances to reduce its taxable income. The tax savings are passed to the lessee as a lower cost of finance. The basic prerequisites are relatively high tax rates in the lessor's country, liberal depreciation rules and either very flexible or very formalistic rules governing tax ownership.

(iii) 'Financial Engineering' – Financial Engineering involves the design, development and implementation of innovative financial instruments and processes and the formulation of creative solutions to problems in finance. Financial Engineering lies in innovation and creativity to promote market efficiency. It involves construction of innovative asset-liability structures using a combination of basic instruments so as to obtain hybrid instruments which may either provide a risk-return configuration otherwise unviable or result in gain by heading efficiently, possibly by creating an arbitrage opportunity. It is of great help in corporate finance, investment management, money management, trading activities and risk management.

In recent years, the rapidity with which corporate finance and investment finance have changed in practice has given birth to a new area of study known as financial engineering. It involves use of complex mathematical modeling and high speed computer solutions.

It has been practiced by commercial banks in offering new and tailor-made products to different types of customers. Financial Engineering has been used in schemes of mergers and acquisitions.

The term financial engineering is often used to refer to risk management also because it involves a strategic approach to risk management.

(iv) A forward-to-forward contract is a swap transaction that involves the simultaneous sale and purchase of one currency for another, where both transactions are forward contracts. It allows the company to take advantage of the forward premium without locking on to the spot rate. The spot rate has to be locked on to before the starting date of the forward-to-forward contract.

A forward-to-forward contract is a perfect tool for corporate houses that want to take advantage of the opposite movements in the spot and forward market by locking in the forward premium at a high or low. Now, CFOs can defer locking on the spot rate to the future when they consider the spot rate to be moving in their favour. However a forward-to-forward contract can have serious cash flows implications for a corporate.

(v) Economic value added (EVA) measures economic profit/ loss as opposed to accounting profit/loss. EVA is essentially the surplus left after making an appropriate charge for the capital employed in the business. It may be calculated in any of the following, apparently different but essentially equivalent, ways :

$$EVA = NOPAT - c \times Capital$$

$$EVA = Capital\ (r - c)$$

$$EVA = [PAT + Int.\ (1 - t)] - c \times Capital$$

$$EVA = PAT - k_e \times Equity$$

Where EVA is the economic value added, NOPAT is the net operating profit after tax, c is the cost of capital, Capital is the economic book value of the capital employed in the firm, r is the return on capital, PAT is the profit after tax, Int. is the interest expense of the firm, t is the marginal tax rate of the firm, k_e is the cost of equity, and equity is the equity employed in the firm.

EVA will rise if operating efficiency is improved, if value adding investments are made, if uneconomic activities are curtailed and if the cost of capital is lowered.

Q. 3. (a) What is foreign exchange risk ? Briefly explain the major types of foreign exchange exposures.

(b) ABC Ltd. is contemplating whether to replace an existing machine or to spend money on overhauling it. ABC Ltd. Currently pays no taxes. The replacement machine costs Rs. 90,000 now and requires maintenance of RS. 10,000 at the end of every year for eight years. At the end of eight years it would have a salvage value of Rs. 20,000 and would be sold. The existing machine requires increasing amounts of maintenance each year and its salvage value falls each year as follows :

Year	Maintenance (Rs.)	Salvage (Rs.)
Present	0	40,000
1	10,000	25,000
2	20,000	15,000
3	30,000	10,000
4	40,000	0

The opportunity cost of capital for ABC Ltd. is 15%.

Required :

When should the company replace the machine?

(Notes : Present value of an annuity of Re. 1 per period for 8 years at interest rate of 15% : 4.4873; present value of Re. 1 to be received after 8 years at interest rate of 15% : 0.3269)

Answer 3. (a)

Foreign exchange risk concerns the variance of the domestic currency value of an asset, liability or operating income that is attributable to unanticipated variances in the exchange rates. Foreign exchange risk is an exposure of facing uncertain future exchange rate. When firm and individuals are engaged in cross-border transactions, they are potentially exposed to foreign exchange risk that they would not normally encounter in purely domestic transactions.

Foreign exchange exposures can be classified into three broad categories :

(i) **Transaction exposure :** Transaction exposure arises when one currency is to be exchanged for another and when a change in foreign exchange rate occurs between the time a transaction is executed and the time it is settled.

(ii) **Translation exposure :** When the assets and liabilities of trading transactions are denominated in foreign currencies, then there may be risk of translation from such denominations into home currencies. This will also be due to fluctuations in the rates of different currencies.

(iii) **Economic exposure** : Economic exposure is the risk of a change in the rate affecting the company's competitive position in the market. It is normally defined as the effect on future cash flows of unpredicted future movements in exchange rates. This affects a firm's competitive position across the various markets and products and hence the firm's real economic value.

Answer 3. (b)

We need to use the equivalent annual cost method as the machine which is currently used and the replacement machine are having different lives. We first find the equivalent annual cost of new machine and then see for each of the four years the incremental cost. We choose that year in which incremental cost is least.

PV of costs of new machine = Rs. 90,000 + Rs. 10,000 × PVIFA (15%, 8) – Rs. 20,000 × PVIF (15%, 8)
= Rs. 90,000 + Rs. 44,873 – Rs. 6,538
= Rs. 1,28,335

Equivalent annual cost of new machine = Rs. 1,28,335 / PVIFA (15%, 8)
= Rs. 28,600

If we replace machine now :

We get Rs. 40,000 now and then spend from the end of first year Rs. 28,600 for eight years thereafter.

If we replace machine after one year :

We do not get Rs. 40,000 now. This should be treated as lost opportunity. This should be taken as cost. Secondly, we get Rs. 25,000 at the end of the year. Thirdly, we need to spend Rs. 10,000 on maintenance.

Thus,

PV of cost of old machine (if replaced after one year)

= Rs. 40,000 (opportunity cost) + Rs. 10,000 PVIF (15%, 1) – Rs. 25,000 x PVIF (15%, 1)

= Rs. 26,960

Since, we are to spend this amount after one year only, we need to find the future value of this,

= 1.15 × Rs. 26,960 = Rs. 31,000

It is very clear from the above analysis that anyone would prefer to replace it now and spend just Rs. 28,600 and thereafter, rather than spending Rs. 31,000 and Rs. 28,600 thereafter. Though similar calculation can be performed for each year's replacement, the calculations are unnecessary. This is because; the opportunity cost and increasing maintenance would only increase the equivalent annual cost of old machine. The same would be certainly higher than Rs. 28,600.

Q. 4. (a) What is the difference between Economic Value Added and Accounting Profit?

(b) The following is the condensed Balance sheet of NHPC Ltd. at the beginning and end of the year.

Balance Sheets

as at ………………..

Particulars	31.12.2009	31.12.2010
Cash	50,409	40,535
Sundry debtors	77,180	73,150
Temporary investments	1,10,500	84,000
Prepaid expenses	1,210	1,155
Inventories	92,154	1,05,538
Cash surrender value of Life Insurance Policy	4,607	5,353
Land	25,000	25,000
Building, machinery etc.	1,47,778	1,82,782
Debenture discount	4,305	2,867
	5,13,143	5,20,380
Sundry creditors	1,03,087	95,656
Outstanding expenses	12,707	21,663
4% mortgage debentures	82,000	68,500
Accumulated depreciation	96,618	81,633
Allowance for inventory loss	2,000	8,500
Reserve for contingencies	1,06,731	1,34,178
Surplus in P & L A/c	10,000	10,250
Share capital	1,00,000	1,00,000
	5,13,143	5,20,380

The following information concerning the transaction are available :

(i) Net profit for 2010 as per Profit and loss account was Rs. 49,097

(ii) A 10% cash dividend was paid during the year.

(iii) The premium of Life Insurance Policies were Rs. 2,773 of which Rs. 1,627 was charged to Profit and Loss Account of the year.

(iv) New machinery was purchased for Rs. 31,365 and machinery costing Rs. 32,625 was sold during the year. Depreciation on machinery sold had accumulated to Rs. 29,105 at the date of sale. It was sold as scrap for Rs. 1,500. The remaining increase in Fixed Assets resulted from construction of a Building.

(v) The Mortgage Debentures mature at the rate of Rs. 5,000 per year. In addition to the above, the company purchased and retired Rs. 8,500 of Debentures at Rs. 103. Both the premium on retirement and the applicable discount were charged to Profit and Loss Account.

(vi) The allowance for Inventory Loss was created by a charge to expenses in each year to provide for obsolete items.

(vii) A debit to reserve for contingencies of Rs. 11,400 was made during the year. This was in respect of a past tax liability.

You are required to prepare a statement showing the Sources and Applications of funds for the year 2010.

Answer 4. (a)

Earning profit is not sufficient, a business should earn sufficient profit to cover its cost of capital and surplus to grow. Any surplus generated from operating activities over and above the cost of capital is termed as Economic Value Added (EVA). Economic Value Added measures economic profit/ loss as opposed to accounting profit/loss. EVA calculates profit/loss after taking into account the cost of capital, which is the weighted average cost of equity and debt.

Accounting profit on the other hand ignores cost of equity and thus overstates profit or under states loss.

EVA = NOPAT – K x WACC

Where,

NOPAT = Net operating profit after tax = EBIT (1 – t)

K = Capital employed (Equity + Debt)

WACC = Weighted average cost of equity and debt.

The estimates are fine-tuned through several adjustments. For instance, NOPAT is estimated excluding non-recurring income or expenditure. PAT is shown in the profit and loss account to include profit available to the shareholders, both preference and equity. Ability to maintain dividend is not a test of profit adequacy.

EVA is the right measures for goal setting and business planning, performance evaluation, bonus determination, capital budgeting and evaluation.

Simply stated Accounting Profit equals Sales Revenue minus all costs except the cost of equity capital, while Economic Profit is Sales Revenue minus all costs including the opportunity cost of equity capital. Thus economic profit may be lower than the accounting profit. If accounting profit equals the opportunity cost of equity capital, economic profit is zero. Only when accounting profit is greater than the opportunity cost of equity capital, economic profit is positive. Under perfect competition, all firms in the long run earns zero economic profit.

Answer 4. (b)

Statement of Sources and Applications of Funds
for the year ended 31st December 2010

Sources	Rs.	Applications	Rs.
Sale of Machinery	1,500	Purchase of machinery	31,365
Trading profit (adjusted)	75,457	Payment for construction of building	36,264
	76,957	Dividend paid	10,000
Add: Decrease in working capital	28,600	Redemption of debentures	13,755
		Tax liability paid	11,400
		Premium on Life Policy (1,146 + 1,627)	2,773
	1,05,557		1,05,557

Workings :

Statement of Change in Working Capital

	2009 Rs.		2010 Rs.	
Current Assets :				
Cash		50,409		40,535
Sundry debtors		77,180		73,150
Temporary investments		1,10,500		84,000
Prepaid expenses		1,210		1,155
Inventories		92,154		1,05,538
		3,31,453		3,04,378
Less : Current Liabilities :				
Sundry creditors	1,03,087		95,656	
Out. Expenses	12,707		21,663	
		1,15,794		1,17,319
Working capital		2,15,659		1,87,059
Decrease in working capital		–		28,600
		2,15,659		2,15,659

4% Mortgage Debenture Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To 4% Mortgage debenture holders A/c	13,500	By Balance b/d	82,000
To Balance c/d	68,500		
	82,000		82,000

4% Mortgage Debenture holders' Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Bank A/c	13,755	By 4% Mortgage debenture A/c	13,500
		By P & L A/c (Premium on retirement)	255
	13,755		13,755

Accumulated Depreciation Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Building, machinery etc.	29,105	By Balance b/d	96,618
To Balance c/d	81,633	By P & L A/c	14,120
	1,10,738		1,10,738

Allowance for Inventory Loss Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Balance c/d	8,500	By Balance b/d	2,000
		By P & L A/c (bal. fig.)	6,500
	8,500		8,500

Reserve for Contingencies Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Tax Liability (paid)	11,400	By Balance b/d	1,06,731
To Balance c/d	1,34,178	By P & L A/c (bal. fig.)	38,847
	1,45,578		1,45,578

Life Insurance Policy Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Balance b/d	4,607	By P & L A/c (excess over surrender value)	400
To Bank (premium)	1,146	By Balance c/d	5,353
	5,753		5,753

Building and Machinery Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Balance b/d	1,47,778	By Accumulated Dep.	29,105
To Bank A/c (Purchase)	31,365	By Bank A/c (sales)	1,500
To Bank A/c (bal. fig.)	36,264	By P & L A/c (loss on sale)	2,020
(Construction cost of building)		By Balance c/d	1,82,782
	2,15,407		2,15,407

Debenture Discount Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Balance b/d	4,305	By P & L A/c (bal. fig.)	1,438
		By Balance c/d	2,867
	4,305		4,305

Profit and Loss Account

Dr. *Cr.*

Particulars	Rs.	Particulars	Rs.
To Dividend	10,000	By Balance b/d	10,000
To Life insurance policy	400	By Trading profit (adjusted bal. fig.)	75,457
To Debenture discount	1,438		
To Reserve for contingencies	38,847		
To Allow. For inventory loss	6,500		
To 4% Mort. Debentureholders	255		
To Accumulated depreciation	14,120		
To Building and Mach. (loss)	2,020		
To Bank (life insurance premium)	1,627		
To Balance c/d	10,250		
	85,457		85,457

Q. 5. (a) Venture Capital is considered to be a high risk capital. Do you agree? Enumerate the main features of Venture Capital investment.

(b) A company has the following capital structure :

	Rs.
Ordinary shares of Rs. 10 each, fully paid	**40,00,000**
7.5% Cumulative preference shares of Rs. 100 each, fully paid	**2,00,000**
Reserve & retained profits	**45,00,000**
11% Long-term loan	**6,00,000**
Total	**93,00,000**

In addition, the company has a bank overdraft for working capital and this averages to Rs. 10 lakhs. Interest thereon is 15%. You are required to :

Calculate the company's overall rate of return on capital employed in order to ensure :

- **i. Payment of all interest**
- **ii. Dividend of preference dividend**
- **iii. Payment of preference dividend**
- **iv. Ordinary shareholder's dividend is 12%**

Assume the tax rate to be 50%.

Answer 5. (a)

The venture capital can be defined as the "long term equity investments in business which display potential for significant growth and financial return".

The term 'venture capital' comprises of two words viz. 'venture' and 'capital'. The dictionary meaning of 'venture' is a course of proceedings associated with risk, the outcome of which is uncertain and 'capital means resources to start the enterprise. In a narrower sense venture capital is understood as the capital which is available for financing new venture. Broadly, it can be interpreted as the investment of long-term equity finance where the venture capitalist earns his return from capital gain.

The venture capital financing refers to the financing of new high risky venture promoted by qualified entrepreneurs who lack experience and funds to give shape to their ideas. In a broad sense, under venture capital financing, venture capitalist make investment to purchase equity of debt securities from inexperienced entrepreneurs who undertake highly risky venture with potential of success.

The main features of venture capital investment are :

(i) Providing finance of entrepreneurial talents

(ii) Providing capital to persons having managerial skills.

(iii) Expecting a high return in the form of capital gain.

The venture capital schemes are designed to promote technological advancement and innovation through introduction of new products, process or plants and equipments. The activities which, in general need venture capital support are :

(i) Commercial production of viable new process or products.

(ii) Technological up-gradation, including adoption of imported technology suitable to Indian condition.

(iii) Energy conservation with innovative technology.

(iv) Commercial exploitation of proven technology.

Thus, the distinguishing characteristic of venture capital sources is an investment policy aimed at achieving most of the profit through capital gain.

Answer 5. (b)

Calculation of Profit (before tax and interest)

	Rs.	**Rs.**
Interest on Bank overdraft $\left(\text{Rs. }10{,}00{,}000 \times \frac{15}{100}\right)$	1,50,000	
Interest on long-term loans $\left(\text{Rs. }6{,}00{,}000 \times \frac{11}{100}\right)$	66,000	2,16,000
7.5% Dividend on cumulative pref. shares $\left(\text{Rs. }2{,}00{,}000 \times \frac{7.5}{100}\right)$	15,000	
Ordinary shareholders' dividend $\left(\text{Rs. }40{,}00{,}000 \times \frac{12}{100}\right)$	4,80,000	
Reserve & retained profits		
[(Rs. 4,80,000 + 15,000) 4,95,000 × $\frac{100}{60}$ = 8,25,000]		
(8,25,000 – 4,95,000)	3,30,000	8,25,000
Tax @ 50% of Net profit before tax		
Therefore, net profit after tax will be 100% i.e.		8,25,000
Profit before tax and interest		18,66,000

Capital employed :	
(Rs. 93,00,000 + Rs. 10,00,000)	1,03,00,000

Therefore, overall return on capital employed $= \frac{\text{Profit}}{\text{Capital Employed}} \times 100$

$= \frac{\text{Rs. } 18{,}66{,}000}{\text{Rs. } 1{,}03{,}00{,}000} \times 100$

$=$ 18.12%

Q. 6. (a) When a lease can be considered as a Financial Lease?

(b) Aggressive Leasing Company is considering a proposal to lease out a tourist bus. The bus can be purchased for Rs. 5,00,000 and, in turn, be leased out at Rs. 1,25,000 per year for 8 years with payments occurring at the end of each year :

(i) Estimate the internal rate of return for the company assuming tax is ignored.

(ii) What should be the yearly lease payment charged by the company in order to earn 20% annual compound rate of return before expenses and taxes?

(iii) Calculate the annual lease rent to be charged so as to amount to 20% after tax annual compound rate of return, based on the following assumptions :

I. Tax rate is 40%

II. Straight line depreciation

III. Annual expenses of Rs. 50,000 and

IV. Resale value Rs. 1,00,000 after the turn.

Answer 6. (a)

A lease is considered as a Financial lease if the lessor intends to recover his capital outlay plus the required rate of return on funds during the period of lease. It is a form of financing the assets under the cover of lease transaction. A financial lease is a noncancellable contractual commitment on the part of the lessee (the user) to make a series of payments to the lessor for the use of an asset. In this type of leases, lessee will use and have control over the asset without holding ownership of the asset. The lessee is expected to pay for upkeep and maintenance of the asset. This is also known by the name 'capital lease'. The essential point of this type of lease agreement is that it contains a condition whereby the lessor agrees to transfer the title for the asset at the end of the lease period at a nominal cost. At the end of lease it must give an option to the lessee to purchase the asset he has used. Under this lease usually 90% of the fair value of the asset is recovered by the lessor as lease rentals and the lease period is 75% of the economic life of the asset. The lease agreement is irrevocable. Practically all the risks incidental to the asset ownership and all the benefits arising therefrom is transferred to the lessee who bears the cost of maintenance, insurance and repairs. Only the title deeds remain with the lessor.

Answer 6. (b)

(i) Payback period

$= \frac{5{,}00{,}000}{1{,}25{,}000} = 4$ years

PV factor close to 4,000 in 8 years is 4.0776 at 18%

Therefore, IRR = 18% (approx.)

We can arrive at 18.63% instead of 18% if exact calculations are made as follows :

PV factor in 8 years at 19% is 3.9544

By interpolating, we can get

$$\text{IRR} = 18\% + \frac{4.0776 - 4.000}{1.0776 - 3.9544} \times 1\% = 18.63\%$$

(ii) Desired lease rent to earn 20% IRR before expenses and taxes

Present value of inflow annually for 8 years @ 20% = 3.837

$$\text{Lease Rent} = \frac{\text{Rs. } 5{,}00{,}000}{3.837} = \text{Rs. } 1{,}30{,}310 \text{ p.a.}$$

(iii) Revised lease rental on tourist bus to earn 20% return based on the given conditions

PV factor [(X – Expenses – Depreciation) (1 – T) + D] + (PV factor x Salvage value) = C_0

3.837 [(X – 50,000 – 50,000) (1 – 0.4) + 50,000] + (0.233 x 1,00,000) = 5,00,000

3.837 [0.6 x – 60,000 + 50,000] + 23,000 = 5,00,000

2.3022 x = 5,15,070

X = 2,23,730

Verification	Rs.
This may be confirmed as lease rental	2,23,730
Less : Expenses + Depreciation	1,00,000
EBT	1,23,730
Less : Tax 40%	49,492
PAT	74,238
Add : Depreciation	50,000
CFAT	1,24,238

$$= \frac{\text{CO} - \text{PV of SV}}{\text{CFAT}} = \frac{\text{Rs. } 5{,}00{,}000 - \text{Rs. } 23{,}300}{\text{Rs. } 1{,}24{,}238} = 3.837 \text{ or } 20\%$$

Q. 7. (a) Explain the term “Swaps”. Outline the possible benefits to a Company of undertaking an Interest rate swap.

(b) ABC Ltd. Provides you the following information :

Installed capacity	**1,50,000 units**
Actual production and sales	**1,00,000 units**
Selling price per unit	**Re. 1**
Variable cost per unit	**Re. 0.50**
Fixed costs	**Rs. 38,000**
Funds required	**Rs. 1,00,000**

	Financial plan		
Capital structure	**A**	**B**	**C**
Equity shares of Rs. 100 each to be issued at 25% premium	**60%**	**40%**	**35%**
15% debt	**40%**	**60%**	**50%**
10% preference shares Rs. 100 each	**–**	**–**	**15%**

(Assume Income tax @ 40%)

Required :

(i) To calculate the degree of operating leverage, degree of financial leverage and degree to combined leverage for each financial plan.

(ii) To calculate earnings per share and market price per share if price earning ratio in A plan is 10 times and in B and C plan is 8 times.

(iii) To suggest which form of financing should be employed if the firm follows the policy of seeking to maximize the price of its shares.

(iv) To calculate the indifference point between A and B plan.

(v) To calculate the financial break even point for each plan and to suggest which plan has more financial risk.

(vi) To calculate the cost break even point.

Answer 7. (a)

Swaps, as the name implies, are exchange / swap of debt obligations (interest and/or principal payments) between two parties. These are of two types, namely interest swaps and currency swaps. While interest swaps involve exchange of interest obligations between two parties, currency swaps involve two parties who agree to pay each other's debt obligations denominated in different currencies.

Benefits of Interest rate swap :

(i) A company can lower its overall interest burden by making use of the comparative advantage; it has of borrowing in one market compared with another company that has a comparative advantage in another market.

(ii) A company that is paying one type of interest can switch to paying another type of interest, for example from fixed to floating or floating to fixed rates.

(iii) Swaps can be a more cost effective way of reducing interest rate risk than other hedging methods.

(iv) A company can change the structure of its borrowing without giving to terminate existing loan arrangements, and hence incur early termination costs.

(v) Swaps are more flexible than other methods of hedging – there are no prescribed sums or periods of swaps. Swaps can be reversed as required by swapping with another counter party.

Answer 7. (b)

Part (i), (ii) and (iii) Statement showing the calculation of degree of various leverages etc.

Particulars	**Financial Plan A Rs.**	**Financial Plan B Rs.**	**Financial Plan C Rs.**
Sales	1,00,000	1,00,000	1,00,000
Less : Variable cost	50,000	50,000	50,000
Contribution	50,000	50,000	50,000
Less : Fixed Costs	38,000	38,000	38,000
Earnings before Interest & tax (EBIT)	12,000	12,000	12,000
Less : Interest	6,000	9,000	7,500
Earnings before tax (EBIT)	6,000	3,000	4,500
Less : Tax @ 40%	2,400	1,200	1,800
Earnings after tax (EAT)	3,600	1,800	2,700
Less : Pref. Dividend	–	–	1,500
Earnings for equity shareholders	3,600	1,800	1,200
No. of equity shares	480	320	280
Earnings per share (EPS)	7.5	5.625	4.286
Price earning ratio	10	8	8
Market price	75	45	34.286
Operating leverage (Contribution/ EBIT)	4.167	4.167	4.167
Financial leverage (EBIT/ EBT) $\left[\dfrac{\text{EBT}}{\text{EBT} - \dfrac{\text{Pref. Dividend}}{1-t}}\right]$	2.000	4.000	6.000
Combined leverage (Operating leverage x Financial Leverage)	8.334	16.668	25.002

Recommendation : The market price is highest under Financial Plan A, therefore Financial Plan A is recommended.

(iv) Calculation of Indifference Point between Plan A and Plan B

Particulars	**Plan A**	**Plan B**
EBIT	X	X
Less : Interest	6,000	9,000
EBT	X – 6,000	X – 9,000
Less : Tax @ 40%	0.4X – 2,400	0.4X – 3,600
EAT	0.6X – 3,600	0.6X – 5,400
No. of shares	480	320
EPS	$\dfrac{0.6X - 3{,}600}{480}$	$\dfrac{0.6X - 5{,}400}{320}$

At different point, EPS under both plans will be equal.

$$\frac{0.6X - 3{,}600}{480} = \frac{0.6X - 5{,}400}{320}$$

$$192X - 11{,}52{,}000 = 288X - 25{,}92{,}000$$

$$96X = 14{,}40{,}000$$

$$X = 15{,}000$$

The indifference point between Plan A and Plan B is at the EBIT level of Rs. 15,000

(v) Statement showing the calculation of Financial BEP

Particulars	**Plan A**	**Plan B**	**Plan C**
Interest	6,000	9,000	7,500
Preference dividend (after grossing up to tax) $\left[\frac{\text{Preference Dividend}}{1-t}\right]$	–	–	2,500
Financial BEP	6,000	9,000	10,000

Comment : Since financial BEP for Plan C is highest, Plan C has the highest Financial Risk.

(vi) Statement showing the calculation of Cost or operating BEP

Particulars	**Plan A**	**Plan B**	**Plan C**
Fixed cost	38,000	38,000	38,000
P/V Ratio	50%	50%	50%
Cost BEP (in Rs.) $\left[\frac{\text{Fixed Cost}}{\text{P/V Ratio}}\right]$	76,000	76,000	76,000
Cost BEP (in units) [BEP /Selling price per unit]	76,000	76,000	76,000

Q. 8. (a) From the following information, ascertain whether the firm is following an optimal dividend policy as per Walter's model :

Total earnings	**Rs. 6,00,000**
No. of equity shares of Rs. 100 each	**40,000**
Dividend paid	**Rs. 1,60,000**
Price-earnings (P/E) Ratio	**10**

The firm is expected to maintain its rate of return of fresh investment. What should be the P/E ratio at which dividend policy will have no effect on the value of the share ? Will your decision change if the P/E ratio is 5 instead of 10?

(b) M Ltd. has a capital of Rs. 10,00,000 in equity shares of Rs. 100 each. The shares are currently quoted at par. The company proposes declaration of a dividend of Rs. 10 per share. The capitalization rate for the risk class to which the company belongs is 12%.

What will be the market price of the share at the end of the year, if – (i) no dividend is declared; and (ii) 10% dividend is declared?

Assuming that the company pays the dividend and has net profits of Rs. 5,00,000 and makes new investments of Rs. 10,00,000 during the period, how many new shares must be issued ? Use the M. M. Model.

Answer 8. (a)

Calculation of market price of share under Walter's model :

$$P = \frac{D + R_a / R_c \,(E - D)}{R_c}$$

Where P = Market price per share

E = Earnings per share

D = Dividend per share

R_a = Internal rate of return on investment

R_c = Cost of capital

Dividend per share (D) = Rs. 1,60,000 / 40,000 shares = Rs. 4

Earnings per share (E) = Rs. 6,00,000 / 40,000 shares = Rs. 15

Rate of return on firms investment (R_a)

$$= \frac{\text{Rs. } 6{,}00{,}000}{\text{Rs. } 40{,}00{,}000} \times 100 = 15\% \text{ of } 0.15$$

R_c = Cost of capital (inverse of P/E ratio i.e. 1/10) = 0.10

$$P = \frac{4 + (0.15/0.10)\,(15 - 4)}{0.10} = \frac{20.50}{0.10} = \text{Rs. } 205$$

Calculation of P/E ratio at which dividend policy will have no effect on the value of the share

Firm's dividend payout ratio = Rs. 1,60,000/ Rs. 6,00,000 = 0.2667 or 26.67%

Rate of return of the firm (R_a) is 15%, which is more than its cost of capital (R_c) is 10%. Therefore, by distributing 16.67% of earnings, the firm is not following an optimal dividend policy. The optimal dividend policy for the firm would be to pay zero dividend and in such case, the market value of share under Walter's model would be as follows :

$$P = \frac{4 + (0.15/0.10)\,(15 - 0)}{0.10} = \frac{22.50}{0.10} = \text{Rs. } 225$$

The market value of the share would increase by not paying dividend and by retaining all the earnings of the company.

Calculation of market value of share when P/E ratio is 5 instead of 10.

The R_c of the firm is the inverse of P/E ratio i.e. 1/5 = 0.20. In such case $R_c > R_a$

$$P = \frac{4 + (0.15/0.20)\,(15 - 4)}{0.20} = \frac{12.25}{0.20} = \text{Rs. } 61.25$$

The P/E ratio at which the dividend policy will have no effect on the value of the firm when R_c is equal to the rate of return of the firm R_a. Under the situation, P/E ratio is 5, the optimum dividend policy for the company would be 100% dividend payout at which the value of the firm would be maximum.

Answer 8. (b)

(i) Calculation of share price under MM – Dividend Irrelevancy Model

$$P_0 = \frac{P_1 + D_1}{1 + K_e}$$

(a) When dividend is not declared

$$100 = \frac{P_1 + 0}{1 + 0.12} \quad P_1 = 100 \times 1.12 = Rs.\ 112$$

1 + 0.12

(b) When dividend is declared

$$100 = \frac{P_1 + 10}{1 + 0.12} \quad P_1 + 10 = 100 \times 1.12 = Rs.\ 102$$

(ii) Calculation of No. of shares to be issued **(Rs.)**

Particulars		**If no dividend declared**	**If dividend declared**
Net income		5,00,000	5,00,000
Less : Dividend paid		–	1,00,000
Retained earnings		5,00,000	4,00,000
New investments		10,00,000	10,00,000
Amount to be raised by issue of new shares	(i)	5,00,000	6,00,000
Market price per share	(ii)	112	102
No. of new shares to be issued	(i)/(ii)	4,464	5,882

Verification of M. M. Dividend Irrelevancy Theory

Particulars		**If no dividend declared**	**If dividend declared**
Existing shares		10,000	10,000
New shares		4,464	5,882
Total no. of shares at the year end	(i)	14,464	15,882
Market price per share	(ii)	Rs. 112	Rs. 102
Total market value of shares at the end of year	(i) x (ii)	Rs. 16,20,000	Rs. 16,20,000

Analysis – The market value of shares at the end of year will remain the same whether dividends are distributed or not declared.

Q. 9. (a) Explore the interrelationship between Investment, Finance and Dividend Decisions.

(b) A newly formed company has applied for a short-term loan to a commercial bank for financing its working capital requirement.

As a Cost Accountant, you are asked by the bank to prepare an estimate of the requirement of the working capital for that company. Add 10% to your estimated figure to cover unforeseen contingencies.

The information about the projected Profit and Loss Account of the company is as under :

		Rs.
Sales		**21,00,000**
Cost of goods sold		**15,30,000***
Gross profit		**5,70,000**
Administrative expenses	**1,40,000**	
Selling expenses	**1,30,000**	**2,70,000**
Profit before tax		**3,00,000**
Provision for tax		**1,00,000**
***Cost of goods sold has been derived as :**		
Materials used	**8,40,000**	
Wages and manufacturing expenses	**6,25,000**	
Depreciation	**2,35,000**	**17,00,000**
***Less* : Stock of finished goods (10 % produced, not yet sold)**		**1,70,000**
		15,30,000

The figures given above relate only to the goods that have been finished and not to work-in-progress; goods equal to 15% of the year's production (in terms of physical units) are in progress on an average, requiring full materials but only 40% of the other expenses. The company believes in keeping two months' consumption of material in stock.

All expenses are paid one month in arrears' suppliers of material extend 1 ½ months' credit; sales are 20% cash; rest are at two months' credit, 70% of the income-tax has to be paid in advance in quarterly installments.

You can make such other assumptions as you deem necessary for estimating working capital requirement.

Answer 9. (a)

The finance functions are divided into three major decisions, viz., investment, financing and dividend decisions. It is correct to say that these decisions are inter-related because the underlying objective of these three decisions is the same, i.e. maximisation of shareholders' wealth. Since investment, financing and dividend decisions are all interrelated, one has to consider the joint impact of these decisions on the market price of the company's shares and these decisions should also be solved jointly. The decision to invest in a new project needs the finance for the investment. The financing decision, in turn, is influenced by and influences dividend decision because retained earnings used in internal financing deprive shareholders of their dividends. An efficient financial management can ensure optimal joint decisions. This is possible by evaluating each decision in relation to its effect on the shareholders' wealth.

The above three decisions are briefly examined below in the light of their inter-relationship and to see how they can help in maximising the shareholders' wealth i.e. market price of the company's shares.

Investment decision: The investment of long term funds is made after a careful assessment of the various projects through capital budgeting and uncertainty analysis. However, only that investment proposal is to be accepted which is expected to yield at least so much return as is adequate to meet its cost of financing. This have an influence on the profitability of the company and ultimately on its wealth.

Financing decision: Funds can be raised from various sources. Each source of funds involves different issues. The finance manager has to maintain a proper balance between long-term and short-term funds. With the total volume of long-term funds, he has to ensure a proper mix of loan funds and owner's funds. The optimum financing mix will increase return to equity shareholders and thus maximise their wealth.

Dividend decision: The finance manager is also concerned with the decision to pay or declare dividend. He assists the top management in deciding as to what portion of the profit should be paid to the shareholders by way of dividends and what portion should be retained in the business. An optimal dividend pay-out ratio maximises shareholders' wealth.

We can infer from the above discussion that investment, financing and dividend decisions are interrelated and are to be taken jointly keeping in view their joint effect on the shareholders' wealth.

Answer 9. (b)

Statement showing the Net Working Capital Estimate of a Company :

Current Assets :

	Rs.	Rs.	Rs.
Stock of raw material (2 months) :			
(Rs. 8,40,000 x 2/12)			1,40,000
Work-in-progress :			
Raw materials (Rs. 8,40,000 x 15/100)		1,26,000	
Other expenses :			
Wages and manufacturing exp.	6,25,000		
Administrative expenses	1,40,000		
	(7,65,000 x 40%)	3,06,000	4,32,000
Stock of finished goods :			
Stock		1,70,000	
Less : Depreciation 10%			
(i.e. 2,35,000 x 10%)		23,500	1,46,500
Debtors (2 months) :			
Cost of goods sold – Dep. (15,30,000 – 2,11,500)		13,18,500	
[Dep. (2,35,000 – 23,500)]			
Administrative expenses		1,40,000	
Selling expenses		1,30,000	
Total		15,88,500	
Less : Cash sales @ 20%		3,17,700	
		(12,70,800 x2/12)	2,11,800
Cash (say)			50,700

Total investment in current assets				9,81,000
Less : Current liabilities :				
Creditors (1 ½ months) $\frac{(\text{Rs. } 8{,}40{,}000 \times 1\frac{1}{2})}{12}$			1,05,000	
Lag in payment of expenses (1month) :				
Wages and manufacturing expenses				
	(Rs. 6,25,000 x 1/12)	= 52,083		
Administrative expenses				
	(Rs. 1,40,000 x 1/12)	= 11,667		
Selling expenses				
	(Rs. 1,30,000 x 1/12)	= 10,833	74,583	1,79,583
Net working capital				8,01,417
Add : 10% for contingencies				80,142
Estimated working capital requirement				8,81,559

Notes :

1. Depreciation is excluded from the computation of cost of goods sold as it is a non-cash item.
2. Element of profit is excluded here.
3. Assume that cash is required for Rs. 50,700 in order to meet the day-to-day expenses.

Q. 10. (a) What are currency futures? List the steps involved in the technique of hedging through futures.

(b) Lucky Computer Stores is making a business plan for the next five years. Sales growth over the past 2 years has been good. Sales would grow substantially if a major electronics firm is established in the vicinity as proposed by an investor.

Lucky Computers has 3 options :

(i) To enlarge the current store.

(ii) To relocate it at a new site and

(iii) To simply wait and do nothing

The decision to expand or move would take little time and therefore, the stores would not lose revenue. If nothing were done in the first year and strong growth occurred, then the decision to expand would be reconsidered. Waiting longer than one year would allow competition to move in, making expansion no longer feasible.

The assumptions and conditions are :

(i) Strong growth, emanating from the new electronics firm has a probability of 55%

(ii) Strong growth with new site would give annual returns of Rs. 1,95,000 p.a.

(iii) Weak growth with a new site would mean annual returns of Rs. 1,15,000 p.a.

(iv) Strong growth with expansion would yield annual returns of Rs. 1,90,000 p.a.

(v) Weak growth with expansion would mean annual returns of Rs. 1,00,000 p.a.

(vi) There would be returns of Rs. 1,70,000 p.a. at the existing store with no changes in case of strong growth and returns of Rs. 1,05,000 if growth is weak.

(vii) Expansion at current site would cost Rs. 87,000

(viii) A shift to the new site would cost Rs. 2,10,000

(ix) In case of strong growth, if existing site is enlarged during the 2nd year, the cost would still be Rs. 87,000.

Which option should Lucky Computer Stores take, if operating costs for all options are equal?

Answer 10. (a)

A currency futures contract is a derivative financial instrument that acts as a conduct to transfer risks attributable to volatility in prices of currencies. It is a contractual agreement between a buyer and a seller for the purchase and sale of a particular currency at a specific future date at a predetermined price. A futures contract involves an obligation on both parties to fulfil the terms of the contract. A futures contract can be bought or sold only with reference to the USD.

There are six steps involved in the technique of hedging through futures:

(i) Estimating the target income (with reference to the spot rate available on a given date.)

(ii) Deciding on whether Futures Contracts should be bought or sold.

(iii) Determining the number of contracts(since contract size is standardised).

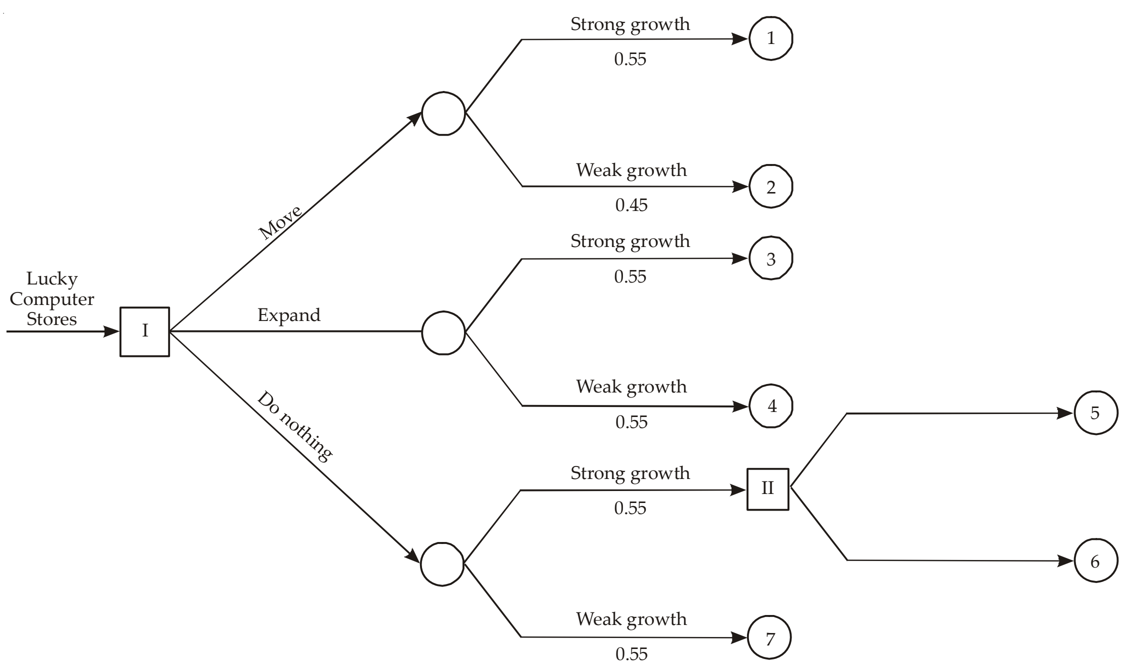
(iv) Identifying profit or loss on target outcome.

(v) Closing out futures position and

(vi) Evaluating profit or loss on futures.

Answer 10. (b)

Decision Tree Analysis :



Computation of expected values for different alternatives from No. 1 to No. 7

Alternatives

(1)	(Rs. 1,95,000 × 5 years) – Rs. 2,10,000	=	Rs. 7,65,000
(2)	(Rs. 1,15,000 × 5 years) – Rs. 2,10,000	=	Rs. 3,65,000
(3)	(Rs. 1,90,000 × 5 years) – Rs. 87,000	=	Rs. 8,63,000
(4)	(Rs. 1,00,000 × 5 years) – Rs. 87,000	=	Rs. 4,13,000
(5)	[(Rs. 1,70,000 × 1 year) + (Rs. 1,90,000 × 4 years)] – Rs. 87,000	=	Rs. 8,43,000
(6)	(Rs. 1,70,0000 × 5 years) – 0	=	Rs. 8,50,000
(7)	Rs. 1,05,000 × 5 years) – 0	=	Rs. 5,25,000

Analysis – There is a decision point II between option 5 and 6. Since option 6 has a better expected value than option 5, we choose option 6 at this decision point.

Expected values

(i) Moving = (7,65,000 x 0.55) + (3,65,000 x 0.45) = Rs. 5,85,000

(ii) Expand Store = (8,63,000 x 0.55) + (4,13,000 x 0.45) = Rs. 6,60,000

(iii) Do nothing now, do not expand next year

= (8,50,000 x 0.55) + (5,25,000 x 0.45) = Rs. 7,03,750

From the above, it is seen that the best decision is to do nothing (both now and next year).

Q. 11. An investment company wants to study the investment projects based on market demand, profit and the investment required, which are independent of each other. Following probability distributions are estimated for each of these three factors :

Annual demand ('000 units)	**25**	**30**	**35**	**40**	**45**	**50**	**55**
Probability	**0.05**	**0.10**	**0.20**	**0.30**	**0.20**	**0.10**	**0.05**
Profit per unit			**3**	**5**	**7**	**9**	**10**
Probability			**0.10**	**0.20**	**0.40**	**0.20**	**0.10**
Investment required (Rs. '000)					**2,750**	**3,000**	**3,500**
Probability					**0.25**	**0.50**	**0.25**

Using simulation process, repeat the trial 10 times, compute the investment on each trial taking these factors into trial. What is the most likely return?

Use the following random numbers :

(30,12,16)	**(59,09,69)**	**(63,94,26)**	**(27, 08, 74)**	**(64, 60, 61)**
(28,28,72)	**(31,23,57)**	**(54,85, 20)**	**(64,68,18)**	**(32,31,87)**

In the bracket above, the first random number is for annual demand, the second one is for profit and the last one is for the investment required.

Answer 11.

$$\text{Annual return (\%)} = \frac{\text{Profit} \times \text{Number of units demanded}}{\text{Investment}} \times 100$$

First of all, random numbers 00-09 are allocated in proportion to the probabilities associated with each of the three variables as given under :

Annual demand

Units ('000)	Probability	Cumulative probability	Random numbers assigned
25	0.05	0.05	00 – 04
30	0.10	0.15	05 – 14
35	0.20	0.35	15 – 34
40	0.30	0.65	35 – 64
45	0.20	0.85	65 – 84
50	0.10	0.95	85 – 94
55	0.05	1.00	95 - 99

Profit per unit

Profit (Rs.)	Probability	Cumulative probability	Random numbers assigned
3	0.10	0.10	00 – 09
5	0.20	0.30	10 – 29
7	0.40	0.70	30 – 69
9	0.20	0.90	70 – 89
10	0.10	1.00	90 - 99

Investment required

Investments (Rs. '000)	Probability	Cumulative probability	Random numbers assigned
2,750	0.25	0.25	00 – 24
3,000	0.50	0.75	25 – 74
3,500	0.25	1.00	75 - 99

Let us now simulate the process for 10 trials. The results of the simulation are shown in the tables given below :

Trials	Random no. of	Simulated demand	Random no. for	Simulated profit per	Random no. for	Simulated investment	Simulated return (%)*
1	30	35	12	5	16	2,750	6.36
2	59	40	09	3	69	3,000	4.00
3	63	40	94	10	26	3,000	13.33
4	27	35	08	3	74	3,000	3.50
5	64	40	60	7	61	3,000	9.33
6	28	35	28	5	72	3,000	5.83
7	31	35	23	5	57	3,000	5.83
8	54	40	85	9	20	2,750	13.09
9	64	40	68	7	18	2,750	10.18
10	32	35	31	7	87	3,500	7.00

* The simulated return is calculated as below :

$$= \frac{\text{Demand} \times \text{profit p.u.}}{\text{Investment}} \times 100$$

The above table shows that the highest likely return is 13.33% which is corresponding to the annual demand of 40,000 units resulting a profit of Rs. 10 per unit and the required investment will be Rs. 30,00,000.

Q. 12. A company is evaluating a new venture that will cost Rs. 10 crore. The venture will have a return on investment of 20% and the firm forecasts a 12% growth in earnings from the project. The treasurer has identified the following sources for financing the project :

a. Equity shares to be sold at Rs. 400 per share.

b. Convertible debentures with a 60% coupon to net Rs. 980 (face value Rs. 1,000), and convertible at Rs. 500 per share after 2005.

c. Debentures with warrants with a 60% coupon to net Rs. 980 (face value Rs. 1,000), and with each bond having one warrant entitling the holder to buy one equity share at Rs. 500 after 2005.

The financing decision is being made in the fourth quarter of 2003. Over the past ten years, the company has been growing at a 10% rate of sales and earnings.

The treasurer expects the company to continue to grow at 10% even though the firm has traditionally paid 40% of its earnings as dividends. The treasurer expects equity shares to continue to rise in price. Using the price trend over the past 5 years, he has projected probable market

price ranges for the next three years. The historical data and the projections of the treasurer are as below :

Year	Historical market	Year price (Rs.)	Forecasted Probability (%)	Market price (Rs.)
2005	220	2008	20	450
2006	250		60	500
2007	330		20	600
2008	270	2009	20	480
2009	380		60	550
2010	450		20	620
	2010	20	500	
		60	600	
		20	700	

The proforma balance sheet and income statement prepared by the treasurer for the year 2010 is shown as below :

Proforma Balance Sheet (December 31, 2010) **Rs. '000**

Liabilities	2010	2009	Assets	2010	2009
Equity shares (Rs. 10 each)	10,000	10,000	Plant and equipment	2,25,000	2,31,000
Shares premium	40,000	40,000	Less : Accumulated depreciation	62,000	59,000
Retained earnings	1,36,000	1,27,000		1,90,000	1,72,000
Bonds (7%)	90,000	52,000	Inventories	64,000	62,000
Mortgage (6%)	30,000	55,000	Receivables	44,000	45,000
Accounts payable	7,000	6,000	Cash and bank balance	22,000	18,000
Other current liabilities	11,000	10,000	Other current assets	4,000	3,000
	3,24,000	3,00,000		3,24,000	3,00,000

Proforma Income Statement **Rs. '000**

	Sales	EBIT	Interest*	EBT	NIAT	EPS
2010	4,20,000	71,500	8,000	63,500	31,750	31.75
2009	3,80,000	65,000	7,000	58,000	29,000	29.00

***Rounded off.**

The management was initially impressed by the fact that the new venture will increase sales by Rs. 12 crore. Management is also interested in the expected 12% growth rate of the venture. As per company's financial policy, the firm's debt-asset ratio should not be above 40%.

With the above information and detailed analysis for next 3 years, what will be the long-term sources of financing for the new proposal?

Make suitable assumptions in your answer, wherever necessary figures could be rounded off. Income tax rate applicable to the company is to be taken at 50%.

Answer 12.

Statement showing EPS in 2010 (end) under various financing options (Rs. In lakhs)

Particulars	With	With new business financed by		
	existing business	Equity Shares	Convertible debt	Debt (+) Warrent
EBIT[1]	786.50	986.50	986.50	986.50
Less : Interest on debt :				
Existing (Rs. 9 crore x 0.07) + (Rs. 3 crore x 0.06)	81.00	81.00	81.00	81.00
New debt (1,02,040[2] debentures x Rs. 60 per debenture)	—	—	61.22	61.22
Earnings before taxes	705.50	905.50	844.28	844.28
Less : Taxes (0.50)	352.75	452.75	422.14	422.14
Earnings after taxes	352.75	452.75	422.14	422.14
Number of shares (in lakhs)	10.00	12.50[3]	10.00	10.00
EPS (Rs.)	35.275	36.22	42.214	42.214

Statement showing EPS in 2013 (end) under various financing options (Rs. In lakhs)

Particulars	With	With new business financed by		
	existing business	Equity Shares	Convertible debt	Debt (+) Warrent
EBIT	951.66[4]	1,202.54[5]	1,202.54	1,202.54
Add : Additional EBIT due to additional funds raised[6]	-	-	-	102.04[7]
Less : Interest on existing debt	81.00	81.00	81.00	81.00
Less : Interest on new debt(in the case of warrant option)	-	-	-	61.22
EBT	870.66	1,121.54	1,121.54	1,162.36
Less : Taxes (0.50)	435.33	560.77	560.77	581.18
EAT	435.33	560.77	560.77	581.18
Number of shares (lakh)	10.00	12.50	12.04[8]	11.02[8]
EPS (Rs.)	43.533	44.862	46.576	52.74

Statement showing debt (assumed to be long-term) to assets ratio in 2010 and 2013 (Rs. In lakhs)

Particulars	**With existing business**	**With new business financed by**		
		Equity Shares	**Convertible debt**	**Debt (+) Warrent**
Year-end 2010				
Total assets	3,240	4,240	4,240	4,240
Existing debt	1,200	1,200	1,200	1,200
Additional debt	-	-	1,020	1,020
Total debt	1,200	1,200	2,220	2,220
Debt/ Assets ratio (%)	37.03	28.30	52.36	52.36
Year-end 2013				
Total assets[9]	3,949.27	5,152.17	5,124.62	5,142.99
Existing debt	1,200	1,200	1,200	1,200
Additional debt	-	-	-	1,020
Total debt	1,200	1,200	1,200	2,220
Debt/Assets ratio (%)	30.39	23.29	23.42	43.19

Recommendation :

Though EPS is the highest (at Rs. 52.74) under debt plus warrant plan, it cannot be implemented as debt/ assets ratio exceed 40% (43.19%). IN view of this, the next best alternative is that the company should opt for convertible debt plan as under this plan potential EPS is the maximum (at Rs. 46.576 in 2013 and at Rs. 42.214 in 2010).

Working notes : (Rs. In lakhs)

1.	(a)	Without new venture		
		EBIT (2003)	715.00	
		Add : 10% growth	71.50	
				786.50
	(b)	With new venture		
		Expected EBIT without new venture		786.50
		Add: 20% growth on Rs. 10 crore new investment (Rs. 10 crore × 0.20)		200.00
				986.50
2.		Number of new debentures to be issued		
		(Amount to be raised Rs. 10 crore/Net proceeds per debenture, Rs. 980)		1,02,040
3.		Number of new equity shares to be issued		
		(Rs. 10 crore/Sale price of equity shares, Rs. 400)		2,50,000
4.		EBIT in 2006 = Current EBIT, Rs. 715 lakh x Growth factor @ 10% for 3 yrs. i.e. 1.331		951.66
5.		EBIT in 2006 wqith new business : Rs. 951.66 lakh + (Rs. 10 crore X 20% ROR × 12% growth factor for 2 yrs. i.e. 1.254 = 250.88 lakh)		1,202.54
6.		Determination of expected market price in 2011 to 2013		

	Years	
2008	**2009**	**2010**
450 x 0.2 = 90	480 x 0.2 = 96	500 x 0.2 = 100
500 x 0.6 = 300	550 x 0.6 = 330	600 x 0.6 = 360
600 x 0.2 = 120	620 x 0.2 = 124	700 x 0.2 = 140
510	550	600

Since expected market price is higher (at Rs. 550 in 2005 and at Rs. 600 in 2006) than the conversion price (i.e. Rs. 500 after 2005), it is reasonable to assume that debt-holders/ warrant-holders will like to exercise their option, resulting in higher number of equity shares in 2006.

7. In the case of convertible debt, no additional funds will accrue. There will be additional funds in the case of warrant option equivalent to (1,02,040 warrants x Rs. 500 issue price of equity share) = Rs. 510.20 lakh.

   As per the principle of conservatism, the ROR likely to be earned on these funds (Rs. 510.20 lakh) is ROR promised by a new venture i.e. 20% or existing ROR which-ever is lower. (Conventionally, ROR is computer on existing long-term funds employed in business at book value).

   $$\text{ROR (on capital employed)} = \frac{\text{EBIT}}{\text{Equity funds} + \text{Long} - \text{term debt}}$$

   = (Rs. 715 lakh/(1860 lakh + 1200 lakh)

   = 23.37 %

   Thus, expected additional EBIT with warrant option is = Rs. 510.20 lakh × 0.2 = 102.04 lakh

8. Number of new equity shares issued

   i. Convertible debts = 1,02,040 debentures × 2 = 2,04,080

   ii. Warrants = 1,02,040 x 1 = 1,02,040

9. Increase in retained earnings during 3 years under various options :

   It is computer as per the following ratio :

   $$\frac{[\text{EAT(year-end2003)} + \text{EAT(year-end2006)}]}{2} \times \text{Retentionratio} \times 3\,\text{years}$$

   i. No new venture = $\frac{[\text{Rs. } 352.75\,\text{lakh} + \text{Rs. } 435.33\,\text{lakh}]}{2} \times 0.6 \times 3\,\text{years}$ = Rs. 709.27 lakhs

   ii. Issue of equity shares = $\frac{[\text{Rs. } 452.75\,\text{lakh} + \text{Rs. } 560.77\,\text{lakh}]}{2} \times 0.6 \times 3\,\text{years}$ = Rs. 912.17 lakh

   iii. Issue of convertible debentures = $\frac{[\text{Rs. } 422.14\,\text{lakh} + \text{Rs. } 560.77\,\text{lakh}]}{2} \times 0.6 \times 3\,\text{years}$

   = Rs. 884.62 lakh

   iv. Issue of debt + warrant = $\frac{[\text{Rs. } 422.75\,\text{lakh} + \text{Rs. } 581.18\,\text{lakh}]}{2} \times 0.6 \times 3\,\text{years}$

   = Rs. 902.99 lakh

It is assumed that the assets will increase by the amount of increase in retained earnings under various options.

Q. 13. (a) Describe the Little – Mirrlees approach to Social Cost Benefit Analysis (SCBA) of a project and the Indian modification of the same.

(b) Superior Engineering proposes a project with the following data :

i. Total asset :Rs. 450 lakhs (Rs. 250 lakhs of Fixed Assets and Rs. 200 lakhs of Current Assets)

ii. Scheme of financing : Rs. 100 lakhs equity, Rs. 200 lakhs term loan, Rs. 100 lakhs working capital advance and Rs. 50 lakhs trade creditors.

iii. Interest rate : Term loan 12% p.a. and working capital advance : 15% p.a.

iv. Term loan is repayable in 5 equal installments, commencing from 3rd year of operations. (Assume that installment for each year is paid on the last day of the year).

v. Depreciation : 30% on written down value.

vi. Production is expected to reach 60% of capacity in the 1st year of operations, 70% in the 2nd year and 80% from the 3rd year onwards.

vii. Expected revenue from the project will be Rs. 500 lakhs p.a. on 10% capacity utilization and corresponding Direct Costs are Rs. 200 lakhs. Fixed costs are Rs. 100 lakhs p.a. Working capital advance of Rs. 100 lakhs is on 80% capacity and proportionately reduced in the first two years.

viii. Tax rate applicable is 50%.

Assuming that each year's production is sold away in the same year, draw the projected profit & loss account for each year of operation and the operational cash flow. Also calculate the Debt Service Coverage Ratio.

Answer 13. (a)

In Social Cost Benefit Analysis (SCBA), the focus is on social costs and benefits of a project. These often tend to differ form the costs incurred in monetary terms and benefits earned in monetary terms of the project.

The principal reasons for the discrepancies are :

(i) Market imperfections

(ii) Externalities

(iii) Taxes and levies

(iv) Concern for savings

(v) Concern for redistribution and

(vi) Merit and demerit of goods.

Little-Mirrlees approach to SCBA involved determining the accounting of shadow prices particularly for foreign exchange, savings and unskilled labour, considering the equity factor and the use of Discounted Cash Flow (DCF) analysis. It seeks to measure costs and benefits in terms of international prices, rather than in terms of domestic prices and also in terms of uncommitted social income.

The Project Appraisal Division of the Planning Commission uses a modified and simplified version of the Little-Mirrlees approach. All industrial projects are evaluated on three aspects – economic rate of return, effective rate of protection and domestic resource cost.

To calculate economic rate of return, the domestic market prices are substituted with international prices for all non-labour inputs and outputs. CIF prices for inputs and FOB prices for outputs are used for all tradable items. For tradable items where international prices are not available and for non-tradable items, social conversion factors are used.

The effective rate of protection is calculated as follows :

$$\frac{[(\text{Value added at domestic prices}) - (\text{Value added at world prices})}{(\text{Value added at world prices})} \times 100$$

Domestic selling prices are net of taxes and excise duty but inclusive of selling commission. The selling price at world prices is the CIF value for imports and FOB value for exports.

Domestic Resource Cost is computed as :

$$\frac{[(\text{Value added at domestic prices})}{(\text{Value added at world prices})} \times \text{Exchange Rate.}$$

Answer 13. (b)

Projected Profit & Loss Account

Year of operation	1	2	3	4	5	6	7
Capacity utilization (%)	60	70	80	80	80	80	80

(Rs. In lakhs)

Revenue	300	350	400	400	400	400	400
Direct variable costs	120	140	160	160	160	160	160
Fixed costs	100	100	100	100	100	100	100
Int. on working cap. adv.	11.25	13.13	15.00	15.00	15.00	15.00	15.00
Profit before depreciation & interest on term loan	68.75	96.87	125.00	125.00	125.00	125.00	125.00
Depreciation	75.00	52.50	36.75	25.73	18.01	12.61	8.82
Interest on term loan	24.00	24.00	24.00	19.20	14.40	9.60	4.80
Profit after dep. & int.	(-)30.25	20.37	64.25	80.07	92.59	102.80	111.38
Tax @ 50%	-	10.19	32.13	40.04	46.30	51.40	55.69
PAT	-	10.19	32.13	40.04	46.30	51.40	55.69
Operational cash flow (PAT + Dep. + Int. on term loan)	68.75	86.68	92.87	84.96	78.70	73.60	69.31
Payments							
Int. on term loans	24.00	24.00	24.00	19.20	14.40	9.60	4.80
Repayment of terms loan	-	-	40.00	40.00	40.00	40.00	40.00
Total	24.00	24.00	64.00	59.20	54.40	49.60	44.80
DSCR (Op. cash flow/ Total payments)	2.86	3.61	1.45	1.44	1.45	1.48	1.55

Average DSCR $= \dfrac{(\text{Total operation cash flow})}{(\text{Total payment against debts})}$

$= (554.87 \div 320.00)$

$= 1.73.$

Q. 14. (a) What category should the following projects be attributed to – Balancing/ Modernisation/ Replacement/ Expansion/ Diversification/ Rehabilitation – or a combination of the above ? Justify your answer.

(i) Duracare Ltd., a company producing consumer durables has been having been severe production constraints due to frequent and long disruption of power supply. They have their own captive power generation facility which can meet 75% of their capacity. They are considering augmenting their own generation to take care of their entire capacity at an investment of Rs. 60 lakhs.

(ii) XYZ Ltd., produces blue detergent powder. Recent studies carried out by marketing indicate that there is a growing opportunity for white detergent powder. Producing detergent powders in two different colours in the same plant requires modification to the existing plant such as, additional facilities for storage and handling. The total investment involved would be Rs. 85 lakhs.

(iii) Economic Producers Ltd., is an ancillary unit producing components for trucks. Their main machinery was installed 17 years back. The equipment is frequently breaking down throwing the delivery schedules out of balance. The equipment can produce 700 components per day. New equipment available for producing the same component costs Rs. 25 lakhs with a delivery time of 3 months.

(iv) Sri Ajit Singh owns 25 acres of land on which he grows wheat. He is planning to buy a tractor to speed up his farm operations as well as reduce input costs.

(v) Milk Products Ltd., is in dairy business, producing milk powder and ghee. Recently, a market survey carried out by the consultants appointed by the company indicates an opportunity for selling cheese. The total outlay in terms of capital expenditure would be Rs. 270 lakhs.

(b) The projected cash flows and the expected net abandonment values for a project are given below :

Year	Cash inflows (Rs.)	Abandonment value (Rs.)
0	(-) 1,00,000	Nil
1	35,000	65,000
2	30,000	45,000
3	25,000	20,000
4	20,000	nil

Should the project be abandoned and if so, when ?

Cost of capital may be taken as 10%.

Present value (PV) factor @ 10% is 1.000, 0.909, 0.826, 0.751 an d0.683 for 0,1,2,3 & 4 years respectively.

Answer 14. (a)

Project classification :

(i) This is a case of Balancing Project in which the capacity of power generation is being augmented by investing Rs. 60 lakhs to cope up with interruptions in power supply and to ensure continuous production.

(ii) This is a case of Modernisation through expansion. The present plant needs sufficient modification to adapt to different colour combinations in detergents along with additional facilities in terms of storage capacity. Thus, it is decided to expand the present warehouse and handling facilities by investing Rs. 85 lakhs.

(iii) This is a Replacement Project. Since the existing machinery was installed 17 years back and is insufficient to support the present demands of the market. It needs to be replaced rather than modified or modernized.

(iv) This is a case of Modernisation of the farming process. By using tractors on farm land, the farming can be done more productively than in the case of a conventional process. Therefore, Shri Ajit Singh is intending to modernize his operations, which would reduce his time & energy and optimize his costs, while increasing the output considerably.

(v) This is a case of Diversification. Since Milk Products Ltd. is already in the business of dairy products, it simply is extending the product line in its existing line of business.

Answer 14. (b)

Expected NPV over 4 years of economic life :

Year	**Cash flow (Rs.)**	**Abandonment value (Rs.)**	**PV factor @ 10%**	**NPV (Rs.) of cash flow**	**NPV (Rs.) of abandonment value**
0	(–) 1,00,000	—	1.000	(–) 1,00,000	—
1	35,000	65,000	0.909	31,815	59,085
2	30,000	45,000	0.826	24,780	37,170
3	25,000	20,000	0.751	18,775	15,020
4	20,000	—	0.683	13,660	—
Total				(–) 10,970	

From the table above, the Total NPV of the project (NPV of cash flows + NPV of abandonment value) at the end of each year are computed as shown below :

Year	**Total NPV at the end of**			
	3 years	**2 years**	**1 year**	
0	(-) 1,00,000	(-) 1,00,000	(-) 1,00,000	
1	31,815	31,815	31,815	
			59,085	Abandonment value
2	24,780	24,780		
		37,170	Abandonment value	
3	18,775			
	15,020	Abandonment value		
Total	(-) 9,610	(-) 6,235	(-) 9,100	

Conclusion : The project should be abandoned since there is no +ve NPV at the end of any year. Further, it should be abandoned at the end of 2nd year, where the losses are the minimal.

Q. 15. A company is considering two mutually exclusive projects X and Y. Project X costs Rs. 30,000 and Project Y Rs. 36,000. You are given below the net present value probability.

Project X		Project Y	
NPV estimate (Rs.)	**Probability**	**NPV estimate (Rs.)**	**Probability**
3,000	**0.1**	**3,000**	**0.2**
6,000	**0.4**	**6,000**	**0.3**
12,000	**0.4**	**12,000**	**0.3**
15,000	**0.1**	**15,000**	**0.2**

(i) Compute the expected net present value of projects X and Y.

(ii) Compute the risk attached to each project.

(iii) Which project do you consider more risky and why?

(iv) Compute the probability index of each project.

Answer 15.

(i) Statement showing computation of expected net present value of the projects X and Y.

Project X			Project Y		
NPV estimate (Rs.)	**Probability**	**Expected value**	**NPV estimate (Rs.)**	**Probability**	**Expected value**
3,000	0.1	300	3,000	0.2	600
6,000	0.4	2,400	6,000	0.3	1,800
12,000	0.4	4,800	12,000	0.3	3,600
15,000	0.1	1,500	15,000	0.2	3,000
	1.0	EV = 9,000		1.0	EV = 9,000

Thus the expected net present value of both projects X and Y are same.

(ii) Computation of Standard Deviation of each project :

For Project X

Probability (P)	**NPV Estimates (Rs.) (μ)**	**(μ - 9,000)**	**P (μ - 9,000)^2**
0.1	3,000	– 6,000	36,00,000
0.4	6,000	– 3,000	36,00,000
0.4	12,000	+ 3,000	36,00,000
0.1	15,000	+ 6,000	36,00,000
		Variance	1,44,00,000

Standard deviation of Project X = $\sqrt{1,44,00,000}$ = Rs. 3,794.73

For Project Y

Probability (P)	NPV Estimates (Rs.)(μ)	(μ - 9,000)	P (μ - 9,000)^2
0.2	3,000	– 6,000	72,00,000
0.3	6,000	– 3,000	27,00,000
0.3	12,000	+ 3,000	27,00,000
0.2	15,000	+ 6,000	72,00,000
		Variance	1,98,00,000

Standard deviation of Project Y = $\sqrt{1,98,00,000}$ = Rs. 4,450

(iii) Risk is measured by the possible variation of outcomes around the expected value and the decision will be taken keeping in view the variation in the expected value where two projects have the same expected value, the decision maker would choose the project which has smaller variation in expected value.

In the selection of one of the two projects X and Y, project Y is preferable because the possible profit which may occur is subject to loss variation (or dispersion), much higher risk is lying with project Y.

(iv) Computation of profitability of each project :

Profitability Index = Present value of cash inflows ÷ Present value of cash outflow

NPV = Sum of total cash inflows – Project cost

Sum of total cash inflows = Project cost + NPV

Project X = Rs. 30,000 + Rs. 9,000 = Rs. 39,000

Project Y = Rs. 36,000 + Rs. 9,000 = Rs. 45,000

Profitability Index :

Project X = Rs. 39,000/ 30,000 = 1.30

Project Y = Rs. 45,000/ 36,000 = 1.25

Thus profitability index of Project X is more than that of Project Y.

Q. 16. (a) An Indian software company receives an order from an European union country. The buyer will pay in four quarterly installments each of €0.5 million, starting from the end of the first quarter. The rates for euros in India is as follow :

Spot	**3 month forward**	**6 month forward**	**9 month forward**	**1 year forward**
Rs. 52.80	**Rs. 52.70**	**Rs. 52.55**	**Rs. 52.50**	**Rs. 52.48**

If an Indian company hedges its foreign exchange rate risk in the forward market, how much revenue does it earn?

(b) Are arbitrage gains possible from the following set of information to the arbitrageur?

Spot rate : 47.88/$

3 month forward rate : Rs. 47.28/$

3 month interest rates :

Re. : 7% p.a.

$: 11% p.a.

Answer 16. (a)

Indian software company will have the following income streams :

Installment	Euro income (€)	Rate (Rs.)	Revenue (Rs.)
1st quarter-end	5,00,000	52.70/€	2,63,50,000
2nd quarter – end	5,00,000	52.55/€	2,62,75,000
3rd quarter-end	5,00,000	52.50/€	2,62,50,000
4th quarter-end	5,00,000	52.48/€	2,62,40,000
Total revenue income is		10,51,15,000	

Answer 16. (b)

3 month forward rate of the dollar is higher (at Rs. 48.28) than the spot rate (Rs. 47.88). It implies that the dollar is at premium.

$$\text{Premium (\%)} = \frac{(\text{Rs. } 48.28 - \text{Rs. } 47.988)}{\text{Rs. } 47.88} \times \frac{12}{3} \times 100 = 3.34\% \text{ per annum}$$

$$\text{Interest rate differential} = 11\% - 7\% = 4\% \text{ per annum}$$

Since interest rate differential (4%) and premium % (3.34%) do not match, there are arbitrage gain possibilities. An arbitrageur can take the following steps in this regard :

(i) Arbitrageur borrows, say, Rs. 100 million at 7% for 3 months (he borrows in Indian currency as it carries lower interest rate).

(ii) He then converts Rs. 100 million in US $ at the spot rate of Rs. 47.88 in the spot market. He gets an amount of US $ 2,088,554.72 (Rs. 100 million/ Rs. 47.88).

(iii) He invests US $ 2,088,554.72 in the money market at 11% interest per annum for 3 months. As a result of this investment, he obtains the interest of US $ 57,435.2548 ($ 2,088,554.72 × 3/12 × 11/ 100).

(iv) Total sum available with arbitrageur, 3 months from now is (US $ 2,088,554.72 amount invested + US $ 57,435.2548 interest) = US $ 2,145,989.974.

(v) Since he would get US $ 2,1451989.974 after 3 months, he sells forward US $ 2,145,989.974 at the rate of Rs. 48.28.

(vi) As a result of a forward deal, at the end of 3 months from now, he would get Rs. 103,608,395.90, i.e. ($ 2,1451989.974 × 48.28).

(vii) He refunds the Rs. 100 million borrowed, along with interest due on it. The refunded sum is Rs. 100 million + Rs. 1,750,000 i.e. (Rs. 100 million × 3/12 × 7/100) = Rs. 101,750,000.

(viii) Net gain is Rs. 103,608,395.90 – Rs. 101,750,000 = Rs. 18,58,395.90.

Q. 17. The investment manager of a large Indian software company receives the following quotes from its foreign exchange broker.

US dollar spot rate : Rs. 47.75/ US $

US dollar option quotation

Strike price	Call			Put		
	September	December	March	September	December	March
45.0000	3.0	-	-	-	-	-
45.5000	2.6	2.9	-	-	-	-
46.0000	2.0	2.3	2.45	0.2	-	-
46.5000	1.85	1.95	2.15	0.25	-	-
47.0000	1.25	1.85	2.00	0.70	-	-
47.5000	0.85	1.15	1.45	1.00	1.25	1.75
48.0000	0.50	0.74	0.89	1.59	1.92	2.50
48.5000	0.30	0.52	0.68	1.70	2.20	-
49.0000	0.15	-	-	1.90	-	-
49.5000	0.10	-	-	2.00	-	-
50.0000	0.08	-	-	2.30	-	-

What calculation will the investment manager make for following questions?

(i) What is the intrinsic value for the December 47.5 call option?

(ii) What is the intrinsic value for the September 46 put option?

(iii) What is the break-even exchange rate for the March 46.5 call and the March 48 put?

(iv) If the March spot rate is expected to be Rs. 48.50/US $, which call option should be bought?

(v) The software company will receive its export income in March and the expected spot rate (in March) will be Rs. 46.5/US $, which put option should be bought?

Answer 17.

Intrinsic value of an option is the amount by which the option is in-the-money.

For a call option, intrinsic value = Maximum [(Spot rate – Strike rate), 0]

For a put option, intrinsic value = Maximum [(Strike rate – Spot rate), 0]

i. Intrinsic value for the December 47.5 call option

= Max [(Rs. 47.75/US $ - Rs. 47.5/US $),0]

= Max [Rs. 0.25/ US $, 0] = Rs. 0.25/ US $

ii. Intrinsic value for the September 46 put option

= Max [(Rs. 46/ US $ - Rs. 47.75/US $), 0]

= Max [-(Rs. 1.75/ US $), 0] = 0

iii. The break-even exchange rate for the March 46.5 call on settlement date is Re. X/US $

So, The premium paid = Rs. 2.15/US $

Profit from the call option = Rs. (X – 46.5)/US $

At break even, Rs. (X – 46.5)/US $ = Rs. 2.15/ US $

X = Rs. 48.65/ US $

The break even exchange rate for March 48 put is :

Premium paid = Rs. 2.50/US $

Profit from the put option = Rs. (48 – X)/US $

At break-even, Rs. (48 – X)/US $ = Rs. 2.50/US $

X = Rs. 45.5/US $

iv. For an expected spot rate of Rs. 48.50/US $,, we need to find out profit from buying the March call option at various strike prices.

Gain from call option

= Max [(Settlement rate – Strike rate),0] – Premium

= value of option at expiration – Premium

Option	Strike price (Rs.)	Premium (A) (Rs.)	Option value at expiration (B) (Rs.)	Gain/ Loss [B – A] (Rs.)
March call	46.00/ US $	2.45/ US $	2.50 / US $	0.05/ US $
March call	46.50/ US $	2.15/ US $	2.00/ US $	- 0.15/ US $
March call	47.00/ US $	2.00/ US $	1.50/ US $	- 0.50/ US $
March call	47.50/ US $	1.45/ US $	1.00/ US $	- 0.45/ US $
March call	48.00/ US $	0.89/ US $	0.50/ US $	- 0.39/ US $
March call	48.50/ US $	0.68/ US $	0.00/ US $	- 0.68/ US $

So, for the expected March spot rate of RS. 48.50/ US $, the March call option of strike price Rs. 46.00/ US $ should be bought.

v. Gain from purchasing the March put option of various strikes, for which quotes are available, for an expiration price of Rs. 46.50/ US $.

Option	Strike price (Rs.)	Premium (A) (Rs.)	Option value at expiration (B) (Rs.)	Gain/ Loss [B – A] (Rs.)
March put	47.50/ US $	1.75/ US $	1.00 / US $	- 0.75/ US $
March put	48.00/ US $	2.50/ US $	1.50/ US $	- 1.00/ US $

As no gains accrue by purchasing the different March put available for the expected March expiration rate of Rs. 46.50/ US $, the software company should not hedge through the put options.

Q. 18. An Indian company is planning to set up a subsidiary in the US. The initial project cost is estimated to be US $ 400 million; working capital requirements are estimated at US $ 40 million. The Indian company followed the straight-line method of depreciation.

The finance manager of the Indian company estimated data in respect of the project as follows :

i. Variable cost of production and sales $ 25 per unit.

ii. Fixed cost per annum are estimated at $ 30 million

iii. Plant will be producing and selling 50 million units at $ 100 per unit and

iv. The expected economic useful life of the plant is 5 years with no salvage value.

The subsidiary of the Indian company is subject to 40% corporate tax rate in the US and the required rate of return of such a project is 12%. The current exchange rate between the two countries is Rs. 48/ US $ and the rupee is expected to depreciate by 3% per annum for next five years.

The subsidiary will be allowed to repatriate 70% of the CFAT every year along with the accumulated arrears of blocked funds at year-end 5, the withholding taxes are 10%. The blocked funds will be invested in the USA money market by the subsidiary, earning 4% (free of tax) per year.

Determine the feasibility of having a subsidiary company in the USA, assuming no tax liability in India on earnings received by the parent from the US subsidiary.

Answer 18.

Cash outflows (t = 0)	**(figures in million)**
Cost of plant and machinery	$ 400
Working capital requirement	40
Incremental cash outflow in rupees ($ 440 million x Rs. 48)	Rs. 21,120

Cash inflows after taxes		**(figures in million)**
Sales revenue (5.0 million units x $ 100)		500
Less : Costs :		
Variable cost (5.0 million units x $25)	$ 125	
Fixed cost	30	
Depreciation ($400 million/ 5 year)	80	235
Earning before taxes		265
Less : Taxes (0.40)		106
Earning after taxes		159
Add : Depreciation		80
CFAT (T = 1 – 4)		239
CFAT in 5th year :		
Operating CFAT	239	
Add : Release of working capital	40	279

Determination of NPV **(figures in million)**

Particulars	**Year**				
	1	**2**	**3**	**4**	**5**
Operating CFAT	$ 239	$ 239	$ 239	$ 239	$ 239
Less : Retention	71.70	71.70	71.70	71.70	-
Repatriation made	167.30	167.30	167.30	167.30	239.00
Less : Withholding tax	16.7	16.7	16.7	16.7	23.9
Accessible funds to parent	150.6	150.6	150.6	150.6	215.1
Add : Repatriation of blocked funds *	-	-	-	-	274
Add : Recovery of working capital	-	-	-	-	40
Re/$ exchange rate	49.44	50.9232	52.4509	54.0244	55.6451
Rupee equivalent	7,445	7,669	7,899	8,136	29,442
PV factor (0.12)	0.893	0.797	0.712	0.636	0.567
Present value	6,648	6,112	5,624	5,174	16,694
Total present value					40,252
Less : Cash outflow					21,210
Net present value					Rs. 19,042

Recommendation : Since the NPV is positive, having a subsidiary in the US is financially viable for the Indian company.

*Repatriation of blocked funds after withholding taxes

Future value in year 5 of blocked funds of 17.7 million each during t = 1 to 4 years invested at 4% per year = 4.246 x 71.7 million = 304.44 million – 30.44 million withholding tax = 274 million.

Q. 19. From the following information, prepare Trading and Profit and Loss Account :

Debt-Equity Ratio (Long-term Debt/Shareholders' Funds)	**2:1**
Capital Gearing Ratio (Funds bearing fixed payments to Equity Shareholder's Funds)	**3:1**
15% Long-term Debts	**Rs. 8,00,000**
Return on Equity Shareholder's Funds	**25%**
Tax Rate	**50%**
15% Preference Share Capital	**?**
***Break-up of Cost-Profit* :**	
Materials	**40%**
Labour	**25%**
Manufacturing Expenses	**10%**
Depreciation on Plant	**10%**
Office & Selling Expenses	**2.5%**
Operating Profit	**12.5%**
	100%

Answer 19.

Dr. **Trading and Profit & Loss Account for the year ended.....** *Cr.*

Particulars	Rs.	Particulars	Rs.
To Materials	9,60,000	By Sales	24,00,000
To Labour Expenses	6,00,000		
To Mfg. Expenses	2,40,000		
To Depreciation	2,40,000		
To Gross Profit @ 15%	3,60,000		
	24,00,000		24,00,000
To Office & Adm. Exp.	60,000	By Gross Profit	3,60,000
To Interest @ 15%	1,20,000		
To Tax 50%	90,000		
To Net Profit after Tax	90,000		
	3,60,000		3,60,000
To Preference Dividend	15,000	By Net Profit after Tax	90,000
To Balance for Equity Shareholders @ 25%	75,000		
	90,000		90,000

Working Notes :

(i) **Calculation of Equity Shareholders' Funds Long-term Debts**

Debt Equity Ratio	=	$\frac{\text{Long-term Debts}}{\text{Shareholders' Funds}}$
2	=	Rs. 8,00,000 / Shareholders' Funds
Shareholders' Funds	=	Rs. 8,00,000/2 = Rs. 4,00,000
Supposing Pref. Share Capital	=	x
Equity Shareholders' Funds	=	Rs. 4,00,000 – x

(ii) **Calculation of Pref. Share Capital**

Capital Gearing Ratio	=	$\frac{\text{Long-term Debts } \textit{plus} \text{ Pref. Share Capital}}{\text{Equity Shareholders' Funds}}$
3	=	$\frac{\text{Rs. } 8{,}00{,}000 + x}{\text{Rs. } 4{,}00{,}000 - x}$
Rs. 12,00,000 – 3x	=	Rs. 8,00,000 + x
x	=	Rs. 1,00,000
Pref. Share Capital	=	Rs. 1,00,000
Equity Shareholders' Fund	=	Rs. 4,00,000 – Rs. 3,00,000

(iii) **Calculation of Operating Profit**

Return on Equity	=	$\frac{\text{Net Profit after Int. Tax \& Pref. Div.}}{\text{Equity Shareholders' Funds}}$
25%	=	x/Rs. 3,00,000
x	=	Rs. 75,000

		Rs.
A.	Net Profit after Int., Tax & Pref. Dividend	75,000
B .	*Add* : Pref. Dividend	15,000
C.	Net Profit after Int. & Tax (A+B)	90,000
D.	*Add* : Tax @ 50%	90,000
E.	Net Profit before Tax	1,80,000
F.	Interest on Long-term Debt @ 15% on Rs. 8,00,000	1,20,000
G.	Operating Profit (E+F)	3,00,000

(iv) **Calculation of Sales**

Operating Cost Ratio	=	87.5%
(Material + Labour + Mfg. Exp. + Dep. + Office & Selling Exp.)		
Operating Profit Ratio	=	100 – 87.5% = 12.5%
	=	Operating Profit/Sales × 100
Sales	=	Rs. 3,00,000/12.5% = Rs. 24,00,000
Materials	=	40% of Rs. 24,00,000 = Rs. 9,60,000

Labour	=	25% of Rs. 24,00,000 = Rs. 6,00,000
Manufacturing Expenses	=	10% of Rs. 24,00,000 = Rs. 2,40,000
Office & Selling Expenses	=	2.5% of Rs. 24,00,000 = Rs. 60,000

Q. 20. (a) The following information is available for the equity stock of Prakash Limited.

S_0 = Rs. 120, *E* = Rs. 110, *r* = 0.12, σ = 0.40

Calculate the price of a 6 month call option as per the Black-Scholes model.

(b) The following information is avilable for the call and put options on the stock of Zenith Limited.

	Call	***Put***
Time to expiration (months)	**3**	**3**
Risk free rate	**10%**	**10%**
Exercise price	**Rs. 50**	**Rs. 50**
Stock price	**Rs. 60**	**Rs. 60**
Price	**Rs. 16**	**Rs. 2**

Determine if the put-call parity is working :

Answer 20. (a)

$$C_0 = S_0\, N(d_1) - \frac{E}{e^{rt}} N(d_2)$$

$$d_1 = \frac{l_n\left(\frac{S_0}{E}\right) + \left(r + \frac{1}{2}\sigma^2\right)t}{\sigma\sqrt{t}}$$

$$d_2 = d_1 - \sigma\sqrt{t}$$

$$d_1 = \frac{l_n\left(\frac{120}{110}\right) + \left(0.12 + \frac{1}{2} \times 0.16\right)0.5}{0.4\sqrt{0.5}}$$

$$= \frac{.0870 + 0.10}{0.2828} = 0.6612$$

$$d_2 = 0.6612 - 0.2828 = 0.3784$$

$$N(d_1) = N(0.6612) = 0.7457$$

$$N(d_1) = N(0.3784) = 0.6474$$

$$\frac{E}{e^{rt}} = \frac{110}{e^{0.12 \times 0.5}} = \frac{110}{1.0618} = 103.60$$

$$C_0 = \text{Rs. } 120 \times 0.7457 - \text{Rs. } 103.60 \times 0.6474 = \text{Rs. } 22.41$$

Answer 20. (b)

According to the put-call parity

$$C_0 = S_0 + P_0 - E/e^{rt}$$

In the problems S_0 = Rs. 60, P_0 = Rs. 2, E = Rs. 50, r = 10% and t = 0.25

If the put-call parity were to work C_0 should be

$$60 + 2 - \frac{50}{e^{0.10 \times 0.25}} = \text{Rs. } 13.23$$

The price of the call option is given to be Rs. 16, which is different from Rs. 13.23. So the put-call parity is not working.

Q. 21. (a) Fresno Corporation Ltd., a US company will need £ 2,00,000 in 180 days. It considers using (1) a forward hedge, (2) a money market hedge, (3) and option hedge, or (4) no hedge. Its analysts develop the following information, whichcan be used to assess the alternative approaches to hedging :

- **Spot rate of pound as of today = $ 1.50**
- **180-days forward rate of pound as of today = $ 1.47**
- **Interest rates per annum are as follows :**

	UK	**US**
180-days deposit rate	**4.5%**	**4.5%**
180-days borrowing rate	**5.0%**	**5.0%**

- **A call option on pounds that expires in 180 days has an exercise price of $ 1.48 and a premium of $ 0.03**
- **Fresno Corporation forecasted the future sport rate in 180 days as follows :**

Possible outcome	**Probability**
$ 1.43	**20%**
1.46	**70%**
1.52	**10%**

Evaluate each alternative with necessary calculation and give your recommendations. (Assume 360 days in a year.) — Ignore Transaction Cost or Taxes.

(b) The following information pertains to RICO Ltd.

	(Amount in Rs. Lakh)
No profit	**60**
Outstanding 12% preference shares	**200**
Number of shares outstanding	**6 lakh**
Return on Investment	**20%**
Equity capitalization rate	**16%**

Required :

(i) What should be dividend pay-out ratio so as to keep the share price at Rs. 41.25 bu using WALTER MODEL?

(ii) What is the optimum dividend pay-out ratio according to Walter Model.

Answer 21. (a)

Fresno Corporation Ltd.

Forward Hedge :

Purchase pounds 180 days forward :

Dollars needed in 180 days = Payable in £ × Forward Rate of £
= 2,00,000 × $ 1.47 = $ 2,94,000

Money Market Hedge :

Borrow $, Convert to £, Invest £, Repay $ loan in 180 days.

Amount in £ to be invested = £ 2,00,000 / (1+0.0225) = £ 1,95,599

Amount in $ needed to = £ 1,95,599 × $ 1.50

Convert into £ for depost = $ 2,93,398

Interest and principal

owed on $ loand and = 2,93,398 × 1.025

after 180 days = $ 3,00,733

Call Option :

Exercise = $ 1.48 : Premium = $ 0.03

Expected Spot Rate In 180 days	Premium Per Unit Paid for Option	Exercise Option	Total Price (including Premium Paid per unit	Total Price Paid for £ 2,00,000 (xi)	Prob. Pi	Expected Amount Pix (xi)
$ 1.43	$ 0.03	No	$ 1.46	$ 2,92,000	0.20	$ 58,400
1.46	0.03	No	1.49	2,98,00	0.70	2,08,600
1.52	0.03	Yes	1.51	3,02,000	0.10	30,200
						$ 2,97,200

NO HEDGE Option / Remain Unhedge :

Future Spot Rate Expected in 180 days	Dollars needed to Purchase £ 2,00,000 (xi)	Prob. Pi	Expected Amount Pix (xi)
$ 1.43	$ 2,86,000	0.20	$ 57,200
1.46	2,92,000	0.70	2,04,400
1.52	3,04,000	0.10	30,400
			$ 2,92,000

Decision : The probability distribution Outcomes for no hedge strategy appears to be must preferable to Fresno Corporation Ltd.

Answer 21. (b)

RICO Ltd.

	(Rs. in lakh)
Net Profit	60.00
Less : Preference dividend (0.12 × 200 lakh)	24.00
Earnings for Equity share holders	36.00
Earnings per share (EPS) = 36 lakh/6 lakh	Rs. 6.00 per share

Let the dividend payout ratio be X.

So the share price will be :

$$P = [D + (E - D)(r/Ke)] / Ke$$

Here,

D = Dividend per share = 6x

P = Market price per share = Rs. 41.25

E = Earnings per share = Rs. 6

r = Return on investment = 20% = 0.20

Ke = Cost of equity = 16% = 0.16

Hefe, Rs. 41.25 = $[6x + (6 - 6x)(0.20/0.16)]/0.16$

$= [6x + (6 - 6x) \times 1.25] / 0.16$

$= [6x + 7.50 - 7.5x] / 0.16$

or, $6.6 = 7.50 - 1.5x$

or $1.5x = 7.50 - 6.60 = 0.90$

$x = 0.90 / 1.5 = 0.60$ i.e., 60%

So, the required dividend payout ratio will be : 60%.

(ii) According to Walter's model where the return on investment (20%) is more than the cost of equity, (16%) the price per share increase as the dividend payout ratio decrease. Hence the optimum dividend payout ratio in this case is nil.

Q. 22. (a) What are forwards? How they can be used to hedge?

(b) On August 2, Mr. Tandon buys 5 contracts of December Reliance futures at 840. Each contract covers 50 shares. Initial margin was set at Rs. 2400 per contract while maintenance margin was fixed at Rs. 2000 per contract. Daily settlement prices are as follows :

August 2	**818**
August 3	**866**
August 4	**830**
August 5	**846**

Mr. Tandon meet all margin calls. Whenever he is allowed to withdraw money from the Margin Account, he withdraws half the maximum amount allowed.

Compute for each day :

(i) Margin call;

(ii) Profit & (Loss) on the contract;

(iii) The balance in the Account at the end of the day.

Answer 22. (a)

Forwards are custom made contracts to buy or sell foreign exchange in the future at a specific price. Maturity and size of contracts can be determined individually to almost exactly hedge the desired position.

The hedging method uses up bank credit lines even when two forward contracts exactly offset each other. The company can hedge its receivables. It could sell dollars forward at a rate which it can obtain from the bank today and thus know for certain the quantum of rupee inflows after three months. A similar approach can be used in the case of a payable. In this case, the company could buy forward at a rate, which is known to-day. A partial or full cover can be adopted by the firm depending on its perception of the risk involved.

All corporate treasurers, hedging their forex exposures with forward contracts, are aware that forward contracts are best hedging instruments for safeguarding against adverse rate movements. Forward contracts only turn the risk upside and lead to opportunity losses in the event of favourable market movements.

Answer 22. (b)

Computation of Margin Call, Profit/(Loss) and Balance in the account at the end of the day :

Initial Margin : 5 Contracts × 2400 = Rs. 12,000.

Maintenance Margin : 5 Contracts × 2000 = Rs. 10,000.

August, 2	**Details**	**Amount Rs.**
Opening Balance		—
Add : Initial Margin Paid	2400 × 5 Contaacts	12,000
Add : Profit & Loss To-day	5 Contracts × 50 shares × (– 22)/Shares	(5,500)
Balance Before Margin		6,500
Add : Margin Call Paid	(Balance fell below Maintenance margin)	
	To bring balance back to Initial Margin	5,500
Closing Balance		12,000

August, 3	**Details**	**Amount Rs.**
Opening Balance		12,000
Add : Profit & (Loss) To-day	5 Contracts × 50 Shares × (+ 48)/shares	12,000
Balance before withdrawl		24,000
Less : Profit withdrawn	Half of (24,000 – 12,000)	6,000
Closing Balance		18,000

August, 4	Details	Amount Rs.
Opening Balance		18,000
Add : Profit & (Loss) To-day	5 Contracts × 50 Shares × (– 36)/Shares	(9,000)
Balance before Margin Call		9,000
Add : Margin Call paid	To bring balance back to initial Margin (since balance fell below maintenance margin)	3,000
Closing Balance		12,000

August, 5	Details	Amount Rs.
Opening Balance		12,000
Add : Profit & (Loss) To-day	5 Contracts × 50 Shares × (+ 16/Shares)	4,000
Balance before withdrawn		16,000
Less : Profit withdrawn	Half of (16,000 – 12,000)	2,000
Closing Balance		14,000

Margin call whenever balance goes below = 5 Contracts × 2000 = Rs. 10,000

Withdrawl (Half) Whenever margin A/c shows balance above 5 × 2,400 = Rs. 12,000.

Q. 23. (a) Write a short note on Index Future.

(b) An Indian importer has to settle a bill for $ 1,35,000.

The exporter has given the Indian Company two options :

(i) Pay immediately without any interest charge.

(ii) Pay after 3 months, with interest 6% p.a.

The importer's bank charges 16% p.a. on overdrafts.

If the exchange rates are as follows, what should the company do?

Spot (Rs. /$) : 48.35 / 48.36

3-month (Rs. /$) : 48.81 / 48.83

Give reasons for your advice.

Answer 23. (a)

An index Future is a derivative whose value is dependent on the value of the underlying asset (e.g. BSE Sensex, S & P, CNX Nifty). While trading on index futures, an investor is basically buying and selling the basket of securities comprising an index in their relative weights.

Unlike commodity and other futures contracts index future contracts are settled in cash. Index futures contract is basically an obligation to deliver a settlement, an amount equal to M (Multiplier) times the difference between the stock index value on the expiration date of contract and the price at which the contract was originally struck [indicated as (I – P) x M], (the value of M is pre-determined for each stock Market Index). The transactions, in actual practice, are settled through clearing house and no actual or physical delivery of stock is made. At the close of the trading session each day, every customer's position is marked to Market.

Index futures help an investor to take a position on the market and also hedge the share portfolio against adverse market conditions.

Answer 23. (b)

INDIAN IMPORTER

Evaluation of comparative options offered by the exporter for settlement of payment.

	$	Rs.
Option 1 : Pay immediately without any interest charge		
(a) Bill value converted to Indian Rupees (135000 × 48.36)	135000	65,28,600
(b) Interest on borrowing from Bank (O/D) @ 16% p./a. (for 3 month)		2,61,144
Total		67,89,744

	$	Rs.
Option 2 : Pay after 3 months, with interest @ 6% p.a.		
(a) Bill value	135000	
(b) Interest @ 6% p.a. for 3 months	2025	
Conversion of Indian Rupees	137025	
@ Forward Rs. / $ Rste (137025 × 48.83)		66,99,931
Saving		98,813

Advice : In the light of evaluated options — Supra, it is advisable to settle the payable after 3 months — Since

(i) Rupee outflow is less by Rs. 98813 in the option 2

(ii) the 3 months forward premium on US $ is less than the interest differential.

Q. 24. (a) Explain what is meant by Free Cash Flow?

(b) Sumit Ltd. in planning to import an equipment from Japan at a cost of 3,400 lakh yen. The company may avail loans at 18 per cent per annum with quarterly rests with which it can import the equipment. The company has also an offer from Osaka branch of an India based bank extending credit of 180 days at 2 percent per annum against opening of an irrecoverable letter of credit.

***Additional information* :**

Present exchange rate	**Rs. 100 = 340 yen**
180 day's forward rate	**Rs. 100 = 345 yen**

Commission charges for letter of credit at 2 percent per 12 months.

Advise the company whether the offer the foreign branch should be accepted.

Answer 24. (a)

Free Cash Flow is the cash flow available to a company from operations after interest expenses, tax, debt repayments and lease obligations, any charge in working capital and capital spending on assets needed to continue existing operations. The free cash flow is the legitimate cash flow for the purpose of business valuation in that it reflects the cash flows generated by a company's operations for all the providers (debt and equity) of its capital. The free cash flow is a more comprehensive term as it includes cash flows due to after tax non-operating income as well as adjustment for non-operating assets.

The procedure of determining FCF is exhibited below :

Operating earning after tax	xxxxxx
Add : Depreciation, amortization and other non-cash items	xxxxxx
Less : Investments in long term assets	xxxxxx
Less : Investments in operating net working capital	xxxxxx
Operating free cash flows	xxxxxx
Add : Non-operating income/ cash flows after tax	xxxxxx
Add : Decrease 9less in increase) in non-operating assets (say marketable securities)	xxxxx
Free Cash Flow	xxxxx

A company that generates sufficient free cash flow has to decide how to use this cash flow. Primarily the cash should be invested in such investments as will increase the shareholder wealth.

Any surplus cash after all positive NPV investments have been undertaken, should be returned to the shareholders, in the form of (i) dividends or, (ii) by share repurchase.

Answer 24. (b)

Alternative I : Purchase of multipurpose machine by availing loan @ 18% interest p.a. (Rs. lakhs)

Cost of machine 3,400 lakhs Yen	(Conversion rate Rs. 100 = 340 Yen)	1,000.00
Add : 1st quarter interest	(@ 18% p.a. on Rs. 1,000 lakhs)	45.00
Add : 2nd quarter interest	(@ 18% p.a. on Rs. 1,045 lakhs)	47.03
Total cash outflow		1,092.03

Alternative II : Extension of 180 days credit by Osaka branch of an India-based bank (Rs. lakhs)

Commission charges for establishment of letter of credit (@ 2% per annum for 180 days on Rs. 1,000 lakhs)	10.00
Add : 1st quarter interest	0.45
2nd quarter interest	0.47
	10.92

Amount payable at the end of 180 days (lakh Yen)

Cost		3,400.00
Interest @ 2% p.a.	(3,400 × 2/100 × 180 / 365)	33.53
Total Yen		3,433.53

Amount in Rupees (Rs. lakhs)

Conversion of Yen into rupees	$\frac{3,433.53}{3435} \times 100$	995.23
Add : Charges on letter of credit and interest charges thereon		10.92
Total cash outflow		1,006.15

Recommendation : The total cash outflow is lesser in case of Alternative II by Rs. 85.88 lakhs. Therefore, import of machine by establishing letter of credit is suggested.

Q. 25. The following table shows interest rates for the United States Dollar and French Francs. The spot exchange rate is 7.05 Francs per dollar. Complete the missing entries :

Particulars	*3 Months*	*6 Months*	*1 Year*
Dollar interest rate (annually compounded)	**11½%**	**12¼%**	**?**
Franc interest rate (annually compounded)	**19½%**	**?**	**20%**
Forward Franc per Dollar	**?**	**?**	**7.5200**
Forward discount on Franc per cent per year	**?**	**– 6.3%**	**?**

Answer 25.

(a) Calculation of 3 months forward discount on Franc per cent per year and 3 months forward Franc per Dollar

3 months Dollar interest rate = 11.5% or 0.115

3 months Franc interest rate = 19.5% or 0.195

As per Interest Rate Parity Theorem :

Interest rate differential = Exchange rate differential

$$\frac{1+r_d}{1+r_f} = \frac{S_{f/d}}{F_{f/d}}$$

where,

r_f = Rate of interest of country with Francs as currency

r_d = Rate of interest of country with Dollar as currency

$S_{f/d}$ = Spot rate between Franc and Dollar

$F_{f/d}$ = Forward rate between Franc and Dollar

Interest rate differential = Exchange rate differential

$\frac{1+0.115}{1+0.195}$ = Exchange rate differential (differential between forward rate and spot rate)

Differential between forward and sport = 93.3%

∴ Forward discount on Franc per cent for 3 months = 93.3% – 100% = – 6.7%

Forward discount on Franc per cent for 3 months = – 6.7%/4 = – 1.675%

Sport rate of Franc against Dollar = 1/7.05 = 0.141844

Forward Franc = Today's spot rate (difference between forward and spot rate)

= 0.141844 dollar (100% – 1.675%) = 0.1394681 dollar

Forward Franc per Dollar = 1/0.1394681 = 7.17

(b) Calculation of 6 months Franc interest rate and 6 months forward Franc per Dollar

6 months Dollar interest rate = 12 1/4% or 12.25%

Forward discount on franc % per year = – 6.3% or – 3.15% for 6 months

Hence 6 months Forward rate = 0.141844 dollar (spot rate) (100% – 3.15%)

= 0.13737 dollars

Forward francs per dollar = 1/0.13737 = 7.28 francs

Differential in interest rate between two countries

= Differential between Forward and Spot rate

$\frac{1+\text{Dollar interest rate}}{1+\text{Franc interest rate}}$ = Differential between Forward and Spot rate

$\frac{1+.1225}{1+\text{Franc interest rate}}$ = (100% – 6.3%)

$\frac{1.1225}{1+\text{Franc interest rate}}$ = 93.7%

1 + Franc interest rate = $\frac{1.1225}{93.7\%}$

Franc interest rate = 1.19797 – 1 = 0.19797 or 19.8%

(c) Calculation of one year Dollar interest rate and one year forward discount on Franc

One year Franc interest rate = 20%

Forward Franc per dollar = 7.5200

($)

Today's spot rate is 7.05 (given) Francs per Dollar i.e., 1 France	0.141844
Forward Frans is 7.52 Frans per Dollar i.e., 1 France	0.132978
Difference	0.008866

Forward discount on Francs per cent per year

$= \frac{0.008866}{0.141844} \times 100$ = – 6.25% or – 6.3% (rounded off)

Differential in interest rates between two countries

= Differential between forward rate and spot rate

$\frac{1+\text{Dollar interest rate}}{1+0.20} = \frac{7.05}{7.52}$

Dollar interest rate = 1.20 × 0.9374 – 1

= 1.125 – 1 = 0.125 or 12.5%

Q. 26. (a) XYZ Ltd. a US firm will need £ 3,00,000 in 180 days. In this connection, the following information is available :

Spot rate 1£ = $ 2.00

180 days forward rate of £ as of today = £ 1.96

Interest rates are as follows :

Particulars	**U.K.**	**U.S.**
180 days deposit rate	**4.5%**	**5%**
180 days borrowing rate	**5%**	**5.5%**

A call option on £ that expires in 180 days has an exercise price of $ 1.97 and a premium of $ 0.04.

XYZ Ltd. has forecasted the spot rates 180 days hence as below :

Future rate ($)	**1.91**	**1.95**	**2.05**
Probability	**25%**	**60%**	**15%**

Which of he following strategies would be most preferable to XYZ Ltd.?

(a) a forward contract

(b) a money market hedge

(c) an option contract

(d) no hedging

Show calculations in each case.

(b) For imports from UK, Philadelphia Ltd. of USA owes £ 6,50,000 to London Ltd., payable on May, 2010. It is now 12 February, 2010.

The following future contracts (contract size £ 62,500) are available on the Philadelphia exchange :

Expiry	**Current futures rate**
March	**1.4900 $/£ 1**
June	**1.4960 $/£ 1**

(i) Illustrate how Philadelphia Ltd. can use future contracts to reduce the transaction risk if, on 20 May the spot rate is 1.5030 $/£ 1 and June futures are trading at 1.5120 $/£. The spot rate on 12 February is 1.4850 $/£ 1.

(ii) Calculate the "hedge efficiency" and comment on it.

Answer 26. (a)

(a) **Taking a Forward Contract**

US $ needed on expiration of 180 days

= £ 3,00,000 × $ 1.96 = $ 5,88,000

(b) **Money Market Hedge Transaction**

Now :

Borrow in US dollars and invest in UK pounds on expiration of 180 days

On expiration of 180 days :

Repay in US $:

US $ needed to purchase UK £

$$= \frac{£\,3,00,000}{1+0.045} \qquad = £\ 2,87,081$$

US $ needed to convert into UK £

= £ 2,87,081 × $ 2 = $ 5,74,162

Principal and interest payable in US $ loan on expiry of 180 days

= $ 5,74,162 × $ 1.055 = $ 6,05,741

(c) **Entering into Option Market by taking Call Option**

Expected spot rate in 180 days	Premium per unit	Exercise option	Total price per unit	Total price for £ 3,00,000 (x)	Probability (p)	(px)
1.91	0.04	No	1.95	5,85,000	0.25	1,46,250
1.95	0.04	No	1.99	5,97,000	0.60	3,58,200
2.05	0.04	Yes	2.01	6,03,00	0.15	90,450
						5,94,900

Answer 26. (b)

(a) For Philadelphia Ltd. the appropriate futures contract will be the one that will expore soonest after the end of the exposure period i.e. the June contract.

Number of contracts needed

= £ 6,50,000/£ 62,500 = 10.4 (say 10 contracts)

P Ltd. will buy 10 June contracts now (12 Feb.) at $1.4960/£1 and sell 10 contracts on 20 May for $1.5120/£1, thus making a profit from the futures trading that will largely but not totally, netate the 'loss' from the spot market (since sterling has strengthened between 12 February and 20 May).

We now calculate the profit/loss from the futures contracts trade :

(i) The 'tick' movement is (1.5120 – 1.4960) = 0.0160 i.e., 160 ticks (for one tick = 0.00001)

(ii) 'Tick' value per contract = £ 62,500 × 0.00001 = $ 6.25

(iii) Profit = 10 contracts × 160 × $ 6.25 = $ 10,000

(iv) Overall cost on 20 May when P Ltd. will exchange $ for £ on the spot market :

(v) The net 'cost' to P Ltd.

= $ 9,76,950 – $ 10,000 = $ 9,66,950

(b) Hedge Efficiency

The spot on February 12 was 1.4850 $/£1. So £650.000 would have cost $ 9,65,250 and the los on the 'spot market' is $ (9,76,950 – 9,65,250) = $ 11,700.

The hedge efficiency is therefore the future contract profit divided by the spot market loss

$$= \frac{\$10,000}{\$11,700} \times 100 \quad = \quad 85.5\%$$

The inefficiency is due to :

(i) rounding the contracts to 10 from 10.4, and

(ii) basis risk - the fact that the movement on the futures price has not exactly equalled the movement on the spot rate.

Q. 27. (a) The following quotes are avilable for 3-months options in respect of a share currently traded at Rs. 31 :

Strike price	**Rs. 30**
Call option	**Rs. 3**
Put option	**Rs. 2**

An investor devises a strategy of buying a call and selling the share and a put option. Draw his profit/loss profile if it is given that the rate of interest is 10% per annum. What would be the position if the strategy adopted is selling a call and buying the put and the share?

(b) What is the difference between Forward and Futures contracts?

Answer 27. (a)

Strategy I : Buying a call and selling a put and a shre

Initial cash inflow (Rs. 31 – Rs. 3 + Rs. 2)	=	Rs. 30
Interest rate	=	10%
Amount grows in 3 months to ($30 \times e^{1 \times .25}$)	=	Rs. 30.76*

If the share price is greater than Rs. 30, he would exercise the call option and buy one share for Rs. 30 and his net profit is Rs. 0.76 (i.e. Rs. 30.76 – 30).

However, if the share price is less than Rs. 30, the counter-party would exercise the put option and the investor would buy one share at Rs. 30. The net profit to the investor is again Rs. 0.76.

Strategy II : Selling a calland buying a put and a share

In case, the investor has to arrange a loan @ 10% of Rs. 30 (i.e. Rs. 31 + Rs. 2 – Rs. Rs. 3).

This amount would be repaid after 3 months. Amount payable ($30 \times e^{1 \times .25}$) is Rs. 30.76.

After 3 months, if the market price is more than Rs. 30, the counter-party would exercise the call option and the investor would be required to sell the share at Rs. 30. The loss to the investor would be Rs. 0.76 (i.e. Rs. 30.76 – 30).

However, if the rate is less than Rs. 30, the investor would exercise the put option and would get Rs. 30 from the rate of share. The loss to be buyer would again be Rs. 0.76.

* Interest can also be calculated on simple interest basis instead of continuous compound interest.

Answer 27. (b)

Fundamentally, forward and futures contracts have the same function: both types of contracts allow people to buy or sell a specific type of asset at a specific time at a given price.

However, it is in the specific details that these contracts differ. First of all, futures contracts are exchange-traded and, therefore, are standardized contracts. Forward contracts, on the other hand, are private agreements between two parties and are not as rigid in their stated terms and conditions. Because forward contracts are private agreements, there is always a chance that a party may default on its side of the agreement. Futures contracts have clearing houses that guarantee the transactions, which drastically lowers the probability of default to almost never.

Secondly, the specific details concerning settlement and delivery are quite distinct. For forward contracts, settlement of the contract occurs at the end of the contract. Futures contracts are marked-to-market daily, which means that daily changes are settled day by day until the end of the contract. Furthermore, settlement for futures contracts can occur over a range of dates. Forward contracts, on the other hand, only possess one settlement date.

Lastly, because futures contracts are quite frequently employed by speculators, who bet on the direction in which an asset's price will move, they are usually closed out prior to maturity and delivery usually never happens. On the other hand, forward contracts are mostly used by hedgers that want to eliminate the volatility of an asset's price, and delivery of the asset or cash settlement will usually take place.

Q. 28. Hedging with Commodity Futures :

Bharat Oil Corporation (BOC) imports crude oil for its requirements on a regular basis. Its requirements are estimated at 100 tonnees per month.

Of late, there has been a surge in the prices of oil. The current price (month of June) of crude oil is Rs. 5,500 per barrel. The firm expects the price to rise in coming months to Rs. 5,800 by August. It wants to hedge against the rising prices for its requirements of the month of August.

Multi Commodity Exchange (MCX) in India offers a futures contract in crude oil. The contract size is 100 barrels and August contract is currently traded at Rs. 5,668 per ballel.

(a) How can BOC hedge its exposure against the rising price of crude oil?

(b) If Bharat Oil Corporation hede its exposure at MCX, how many contracts it must book?

(c) Analyse the position of BOC if in the month of August (i) the spot price is Rs. 5,750 and futures price is Rs. 5,788, (ii) the spot price is Rs. 5,417 and futures market were matched?

Ignor marking-to-the-market and initial margin on futures contracts.

Answer 28.

1 tonnes = 7.33 barrels

(a) Hedging strategy would be to take position in the futures market opposite to that of in the physical market.

BOC is short on crude oil and therefore they must go long on the futures of crude oil.

Following would be the hedging strategy :

June : Buy futures contract now

August : Purchase crude oil at the price prevailing then in the spot market, and Sell the future contracts.

(b)

Quantity to be imported/hedged	= 100 tonnes or 733 barrels
Contract size	= 100 barrels
Nos of contracts bought	= 733/100 = 8 (rounded off)

(c) In August, the firm would buy its requirements of crude oil in the market and unwind its position in the futures market by selling the contracts bought in June. By doing so, the gains/loss in the physical market would be offset significantly.

August futures on crude oil = Rs. 5,668 per barrel

(i) When the price of crude oil rises :

Spot crude oil price = Rs. 5,750 Future price = Rs. 5,788

Purchase price in the spot for = 733 × 5750 = Rs. 42,14,750

Cash flow on futures position

Buying price	5668
Selling price	5788
Profit	120

Realizations from futures market = 8 × 100 × 120

	= – Rs. 96,000
Net amount paid	Rs. 41,18,750
Effective price per barrel = 41,18,750/733	= Rs. 5,619

(ii) When the price of crude oil falls :

Sport crude oil price = Rs. 5,417

Futures price = Rs. 5,455

Purchase price in the spot for = 733 × 5417 = Rs. 39,70,661

Cash flow on futures position

Buying price	5668
Selling price	5455
Profit	– 213

Realisations from futures market = 8 × 100 × – 213

	= Rs. 1,70,400
Net amount paid	Rs. 41,41,061
Effective price per barrel = 41,41,061/733	= Rs. 5,649

(d) If positions in the physical market and futures market were matched then

The effective price would be = $S_1 - (F_1 - F_0)$

When price rose the effective price paid is

= 5750 – (5788 – 5668) = Rs. 5,630 per barrel

When price fell the effective price paid is

= 5417 – (5455 – 5668) = Rs. 5,630 per barrel

Q. 29. Option Pricing – Black Scholes Model :

The following data is given :

Current stock price	**= Rs. 100.00**
Strike Price	**= Rs. 110.00**
Time to expiration	**= 3 months**
Risk free rate of return	**= 6.00%**
Variance of return on the stock	**= 0.0625**

(a) Find out the value of the call option using Black Scholes Model.

(b) Find out the intrinsic value and the time value of the call option.

(c) Using put call parity, find out the value of the put option with same parameters.

(d) Find out the intrinsic values and time values of the put option.

Answer 29.

(a) The value of the call option for non-dividend paying stock is given by Black Scholes Model (BSM) :

$$c = SN(d_1) - Xe^{-rt}N(d^2)$$

where $d_1 = \dfrac{\ln(S/X) + (r + \sigma^2/2)t}{\sigma\sqrt{t}}$; and

$d_2 = \dfrac{\ln(S/X) + (r - \sigma^2/2)t}{\sigma\sqrt{t}}$ or $d_2 = d_1 - \sigma\sqrt{t}$

Following values may be inserted in the BSM to find the value of the call.

Spot Price, s = Rs. 100.00

Exercise Price, X = Rs. 110.00

Time to expiry, t = 3 months = 0.25 years

Interest Rate, r = 6% p.a.

Satandard Deviation, σ = 25% p.a.

Inserting the values, we get :

$d_1 = -0.5800$; $N(d_1) = 0.2810$

$d_2 = -0.7050$; $N(d_2) = 0.2404$

$S \times N(d_1) = 28.1000$

PV of X = 108.3623

$PV(X) \times N(d_2) = 26.0503$

Call Value = $S \times N(d_1) - PV(X) \times N(d_2)$ = Rs. 2.05

(b) Intrinsic value of call, Max (S – X, 0) = Rs. 0.00

Time value of the call = 2.05 – 0 = Rs. 2.05

(c) Put Call Parity states that the difference of the call and put price must be equal to the difference of spot and present value of the exercise price.

$c - p = S - PV(X)$

$p = c - S + PV(X)$

$= 2.05 - 100 + 108.36 =$ Rs. 10.41

(d) Intrinsic value of put, Max (S – X, 0) = Rs. 10.00

Time value of put Max (S – X, 0) = 10.41 – 10.00 = Rs. 0.41

Q. 30. Cancelling a swap

A company has borrowed through a fixed rate instrument of 8%. The swap quote from the bank is 7.80/7.90, i.e., bank pays 7.80 fixed for receiving LIBOR and would receive 7.90% fixed for paying LIBOR. The company enters the swap deal with the bank.

After some time, the swap market changes to 6.40/6.50 and the company again reverses the original swap by entering into 2nd swap opposite to that of the first one.

(a) What does the structure of the first wap achieve?

(b) What is the cost of funds for the firm before and after the swap?

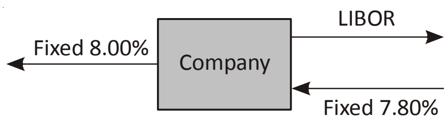
(c) What is the structure of 2nd swap and what does it do?

(d) Find the cost of funds for the company after the second swap?

Answer 30.

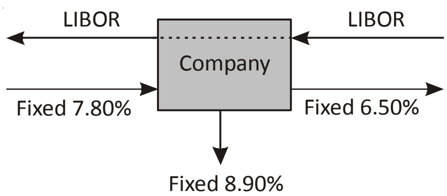
(a) The company would undertake the transform the fixed rate liability to floating rate, as it possibly expects a decline in the interest rates.

Following would be the structure of the swap with the bank.



(b) Cost of funds after swap = L + 0.2%

(c) The company would enter into a swap opposite to that of the first one. In the first swap, the firm received fixed and paid variable. Now in the second swap, it would pay fixed while receiving LIBOR. This would enable cancelling the floating leg. The company would gain the differential of the fixed legs of first and second swap.



(d)

Pay fixed to borrowers	8.00
Receive fixed from bank (1st swap)	– 7.80
Pay fixed to bank (2nd swap)	6.50
Effective cost after 2nd swap	6.70

FINAL EXAMINATION

(REVISED SYLLABUS - 2008)

GROUP - III

Paper-13 : MANAGEMENT ACCOUNTING- STRATEGIC MANAGEMENT

Section I : Strategic Management

Q. 1. Choose the most appropriate alternative from the stated options :

(a) What are the enduring statements of purpose that distinguish one business from other similar firms?

(A) Policies
(B) Mission statements
(C) Objectives
(D) Rules

(b) Which is not essential component of leadership?

(A) Vision
(B) Operational efficiency
(C) Succession planning
(D) Strategy

(c) The acquisition of "Hutch " by 'Vodafone' is an example of —

(A) Vertical Integration
(B) Horizontal Integration
(C) Concentric Diversification
(D) Forward Integration

(d) A strategic business unit (SUB) is defined as a division of an organisation :

(A) That helps in the marketing operation
(B) That enables managers to have better control over the resources
(C) That helps in the choice of technology
(D) That helps in the allocation of scarce resources

(e) Which of the following is NOT an entry barrier to an Industry?

(A) Expected competitor retaliation
(B) Economies of scale
(C) Customer product loyalty
(D) Bargaining power of suppliers

(f) A product line is a group of products that —

(A) are closely related.

(B) are marketed through the same channel.

(C) perform a similar function for being sold to the same customers.

(D) all of the above.

(g) The BCG growth matrix is based on two dimensions —

(A) Market size and Competitive intensity.

(B) Profit margins and Market size.

(C) Relative market share and Market/Industry growth rate.

(D) Market size and Profit margins.

(h) BSNLs plan behind introduction of "Internet Plan 99", ISDN Virtual Private Network etc would be an example of :

(A) Utilisation of newer technologies

(B) Portfolio generation

(C) Diversification of business

(D) Product development

(i) The maturity stage of the PLC is most often associated with :

(A) rapid growth

(B) uncertainty in market

(C) improvements in manufacturing processes

(D) high exit barriers

(j) TISCO's famous advertising campaign of "we also make steel" was meant to: gain buyer loyalty to its products :

(A) inform new buyers about its product portfolio

(B) enhance product quality perception

(C) achieve corporate's social responsibility.

(D) charge a price premium

(k) Switching costs refer to the :

(A) cost of changing a firm's strategic group

(B) cost of installing new electric switches in a factory when technology changes.

(C) one time costs incurred by the customers when they buy from a different supplier.

(D) all of the above.

(l) Directional Policy Matrix is the same as :

(A) the BCG model

(B) the 9-cell GE matrix

(C) the Life cycle portfolio analysis

(D) the PIMS matrix

(m) Which of the following market structures would be commonly identified with FMCG products?

(A) Monopoly

(B) Monopolistic competition

(C) Oligopoly

(D) Perfect competition

(n) Indian Airlines decreasing the airfare on the Delhi-Mumbai sector following the introduction of the no frills airlines would be an example of —

(A) Cost Leadership

(B) Price Leadership

(C) Product Differentiation

(D) Focus

(o) For an actor in Bollywood, his outstanding performance would be a/an

(A) Asset

(B) Strategic asset.

(C) Core competency

(D) Capability

Answer 1.

(a) (B) Mission statements

(b) (B) Operational efficiency

(c) (B) Horizontal Integration

(d) (B) That enables managers to have better control over the resources

(e) (D) Bargaining power of suppliers

(f) (D) all of the above.

(g) (C) Relative market share and Market/Industry growth rate.

(h) (D) Product development

(i) (C) improvements in manufacturing process

(j) (C) achieve corporate's social responsibility.

(k) (C) one time costs incurred by the customers when they buy from a different supplier

(l) (B) the 9-cell GE matrix

(m) (B) Monopolistic competition

(n) (B) Price Leadership

(o) (C) Core competency

Q. 2. (a) Define Strategic Management. State the importance of Strategic Management in today's context.

(b) What are the pitfalls in strategic planning that management in an organization should watch out or avoid?

Answer 2. (a)

Strategic Management may be defined as the set of decisions and actions resulting in formulation and implementation of strategies designed to achieve the objectives of an organization. In other words, strategic management is a stream of decisions and actions, which lead to the development of an effective strategy or strategies to help achieve corporate objectives. In a more pervasive sense, the Strategic Management can be defined as "the formulation and implementation of plans and carrying out activities relating to matters which are of vital, pervasive, or of continuing importance to the total organization.

Some definitions of strategic management include the following :

- **Higgins and Vincze :** "the process of managing the pursuit of the organization's mission while managing the relationship of the organization to its environment, especially with respect to its environmental stakeholders: the major constituents in its internal and external environment affected by its action."
- **Harvey :** "process of formulating, implementing, and evaluating business strategies to achieve future objectives."
- **Pearce :** "the set of decisions and actions resulting in formulation and implementation of strategies designed to achieve the objectives of an organization."
- **Chandler :** "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals."
- **Quinn :** "the pattern or plan that integrates an organization's major goals, policies, and action sequences into a cohesive whole."
- **Glueck :** "a unified, comprehensive, and integrated plan designed to ensure that the basic objectives of the enterprise are achieved."

In a wider sense, Strategic Management is the process which deals with fundamental organizational renewal and growth with development of strategies, structures and systems necessary to achieve such renewal and growth and with the organizational systems needed to effectively manage the strategy formulation and implementation processes.

Research studies show that organizations that engage in strategic management generally outperform those that do not. The attainment of an appropriate match or fit between an organisations's environment and its strategy, structure and processes has positive effects on the organizations performance. Bruce Henderson, founder of BCG, pointed out that firms cannot afford to follow intuitive strategies as the organization becomes large and its environment changes substantially. Naturally the environment of most business is getting increasingly complex and therefore, strategic management tools become essential to make them manageable.

Answer 2. (b)

There are many pitfalls in Strategic Planning that the management in the organization should watch out. The following are some of them :

(i) Non-availability of correct and accurate data.

(ii) Doing strategic planning only to satisfy accreditation or regularity requirements.

(iii) Failing to communicate the plan to the people who are supposed to execute the plan.

(iv) Top management making intuitive decisions that conflict with formal plan.

(v) Failing to use plans as a standard for measuring performance.

(vi) Delegating tasks to a few persons rather than involving all managers.

(vii) Failing to involve key employees in all phases of planning.

(viii) Failing to create an environment conductive to change.

(ix) Lack of flexibility and creativity.

(x) Further, Strategic Management is a costly exercise in terms of the time that needs to be devoted to it by managers but the negative effect of managers spending time away from their operational responsibilities may be quite serious. For defaults on the part of managers in discharging their operational responsibilities may be irreparable.

Q. 3. (a) The SWOT analysis is simple and useful tool of environmental analysis. Discuss its application for an Indian Company.

(b) Explain the methodology adopted to identify such a SWOT. Also, highlight its limitations in the context of a growth orientated company.

Answer 3. (a)

Strength and weakness analysis involves looking at the particular strengths and weaknesses of an organization and its product and service range. It is an internal appraisal and intended to shape its approach to the external world.

An analysis of opportunities and threats is concerned with profit making opportunities in the business environment and identifiable threats-e.g. falling demand, new competition, government legislation etc. It is therefore an external appraisal.

In essence such appraisal seeks to identify the following :

- Shortcoming in the company's present skills and resources.
- Strengths which the company should seek to exploit.

A critical assessment of the strength and weakness, opportunities and threats in relation to the internal and environmental factors affecting an entity is needed. It is also known as SWOT analysis, after the relevant initial letters.

A typical SWOT analysis of an Indian bulk drug company is given below :

Strengths

Excellent reputation for quality of products.

- Best production yields and raw material consumption ratios.
- Trained manpower.
- Fully balanced and integrated production facilities.
- Adequate working capital arrangements.
- Marketing tie-up with reputed formulation units.

Weakness

No patented technology or production process

- Very little in-house R&D.
- No marketing skill within the organization.
- Location in a backward area.
- Dependence on imported raw materials.

Opportunities

Growth in medicare

- Expanding export market.
- Scope for backward integration .
- Scope for obtaining approval from USA.

Threats

Very few entry–barriers

- Too much cut-throat competition.
- Severe fluctuation in foreign exchange rates.
- Formulation subject to price control.

Answer 3. (b)

The methodology generally adopted in the context of SWOT analysis relates to :

(i) Environmental scanning covering both first-hand surveys of demand and supply, stressing forecasts and second hand – information emerging from various sources such as Country Studies by the Economist Intelligence Unit, NCAER and others.

(ii) Scenario planning taking into consideration the emerging problems and prospects with attention given to response management.

Both of these are essential aspects of sensitive management, involved as it is in making the future today. The prospects of growth and the hurdles to cross are to be identified to enable management to take appropriate action, considering that the decisions of today could bind the organization to particular lines in terms of resource commitment and the outcome of such a decision may not be certain and may remain bound by risks. Supervening impossibilities for different reasons may not however be fully anticipated in view of their very nature.

SWOT analysis enables a manager to present a picture before it chooses any strategy. Such assessment clarifies the perspective of the company at a given point of time.

But, SWOT analysis offers a static picture of the company in relation to some specific environmental condition. It lacks the analytical rigor. It is also language sensitive. How ever, any growth oriented company needs to have direction plan or a set of exact strategies. This cannot be formulated on the basis of SWOT.

Q. 4. (a) Unrelated Diversification can sometimes work well. When is unrelated diversification a good strategy? Elaborate with some examples.

(b) Discuss briefly the different strategies of " Joint Venture".

(c) What are the various strategic options available to the companies pursuing a restructuring strategy?

Answer 4. (a)

Unrelated diversification is also known as conglomerate diversification. Under this type of diversification, there will be addition of dissimilar products or services to the existing line of business. It involves diversification into business fields, which are not significantly related or similar to the primary business mission. Further under unrelated diversification, a firm may acquire another firm, which has surplus cash even though there may be nothing common with existing business.

Unrelated diversification is a good strategy where,

(i) Basic industry is experiencing declining annual sales and profits.

(ii) An organization has capital and managerial talent required to compete in a new industry.

(iii) There is some synergy between existing and proposed new areas of business (ITC in apparel/Agri-business)

(iv) Acquire an related business which offers attractive investment opportunity(Kingfisher Airlines)

(v) Existing business is in continuous threat of saturated demand. (Generic chemicals, Cigarette, Land phone etc. business)

(vi) When an organization is subjected to environmental safety or pollution control or anti trust law.

Some of the examples that demonstrate that unrelated diversification working well are listed below :

(i) GE is a classic example of an unrelated diversified company. Its unusual architecture allows its different businesses to effectively learn from one another.

(ii) Virgin group in U. K is another such company that covers trains, airlines, financial services, cola amongst others. The company claims that most of its businesses are aimed at a common socio-demographic segment.

(iii) DCM Ltd has added engineering goods, fertilizers, chemicals, sugar, rayon, tyre, cord etc to its existing business line of textiles.

(iv) Other classic examples are Tata and Reliance, which have developed management expertise and Government connections that enable them to thrive in the peculiar circumstances in India but have then refined their competences in some of their businesses to the point where they are genuinely world class.

Answer 4. (b)

There are three Joint Venture strategies, namely :

- **Spider web strategy :** In this strategy, a small firm establishes a series of joint ventures, so that it can survive and not absorbed by its large competitors.
- **Go together Split Strategy :** In this strategy, the firms agree to form a joint venture for a specific length of time. When that project is completed, they once again split.
- **Successive Integration Strategy :** In this strategy, a firm begins an alliance, which is weak and then develops several joint ventures which can then lead to a merger. In fact, Joint Venture could be a laboratory setting prior to a merger.

Answer 4. (c)

The various strategic options available to the companies pursuing a restructuring strategic options are :

(i) **Divestment/ Withdrawal :** "Divesting" means pulling out of market. Divestment is an option of getting rid of something when the situation of the firm is such that there is no cash advantage to the company and when the market share is so low that the product is no longer viable. Divestment could be –selling off a part of a firm's operations or pulling out of certain product-market areas.

A company may like to resort to this strategic option when it desires to reduce the risk or when it desires to release its "liquid resources". Divestment may be considered attractive when the present worth of expected earnings is less than its present worth.

(ii) **Harvest :** is the strategic option in which the market share is allowed to fall to earn better short term profits. Harvest means a strategy aiming for a lower market share which will give the company its best short-run return with a longer term of eventually pulling out of market. This strategic option is appropriate whence the product has a poor market share in a declining market or when the product has a poor start of a growing market. This strategy can be used to gather in funds which can be divested into other fruitful investment.

(iii) **Liquidation :** This strategic option is exercised in a situation where the firm finds the business as "Unattractive". There could be a number of reasons for this. Obsolete equipments and technology may be one of the reasons for unprofitable and dull business. Nobody, including the employees and outside parties, finds it an attractive proposition to revive the firm.

Apart from the above, there are other strategic options available to a firm in a declining industry. They are :

(iv) **A niche strategy :** "Niche" means concentrating around a product and market. It is a strategy involving very low degree of risk and represents the typical behavior of small companies. Such organizations are in general, scared of growing big as it could entail them into legal, labour and management problems. Therefore they are content with their superior knowledge of local conditions and choose a very narrow segment of market. In India , the Government Policy has always favoured small units.

(v) **Leadership strategy :** Under this, the company aims to be a market leader in a declining market and so achieve above returns for the industry.

Q. 5. Two Companies are discussing a potential merger. Company A is assessing the impact of a potential offer to company B at a price of Rs. 65 as compared to Company B's curreny price of Rs. 54.

Company A has a price-earning ratio of 12X, with current EPS of Rs. 8, a dividend of Rs. 2 and a market price of Rs. 90 to Rs. 100 with a recent price of Rs. 98. One crore shares are outstanding.

Company B has a price-earning ratio of 20X and is growing at twice the 6% rate of Company A. Company B's current EPS is Rs. 3. It pays no dividend and its market price is ranging between Rs. 45 and Rs. 70. Ten lac shares are outstanding.

Calculate the appropriate measures to assess the impact of these terms and discuss potential implications.

Answer 5.

Potential Merger	Company A	Company B
P/E Ratio	12 X	20 X
EPS	Rs.8.00	Rs. 3.00
Dividend per share	Rs. 2.00	None
After – tax earning (= Earning*no. of shares)	Rs. 8 crores	Rs. 30 lacs
Price Range	Rs. 90-Rs. 100	Rs. 45-Rs.70
Current Price	Rs. 98	Rs. 54 (Rs. 65 offered)
Growth rate	6% per year	12% per year

Exchange Ratio :

Share of A for 1 share of B = 65/ 98 = 0.663265

(i) **Impact on earning :**

Earning = Rs. 8 crores + Rs. 30 lacs = Rs. 8.30 crores.

No. of shares = 1 crore + 663265 = 10663265 shares.

Therefore impact = Rs. 8.3 crores/ 1.0663265 = Rs. 7.75 per share.

Hence Dilution = Rs. (8.00 – 7.78) = Rs. 0.22 per share.

(ii) **Impact on Dividend :**

Each share of company B now receives the equivalent of Rs. 1.33 per share in [2 × 0.663265] dividends Vs none before.

(iii) **Impact on Earning Growth (3 years hence)**

Company A @ 6% growth will earn = Ist yr. end = Rs. 8.48 crores
2^{nd} yr. end = Rs. 8.99 crores.
3^{rd} yr. end = Rs. 9.528 crores.

Company B @ 12 %growth will earn = 1^{st} yr. end = Rs. 33.600 lacs
= 2^{nd} yr. end = Rs. 37.632 lacs
= 3^{rd} yr. end = Rs. 42.148 lacs

Thus total earning for the company = Rs. 9.529 cr. + Rs. 42.15 lacs = Rs. 9.9495 cr and EPS = (Rs. 9.9495 cr/10663265 = Rs. 9.33

Comments :

- Dilution in earning of Rs0.22 is not likely to be recovered in near future.
- Even after 3 years, combined EPS is Rs. 9.33 as against Company A's EPS of Rs.9.53
- Dividend of Rs. 1.33 for 'B' is a sizable amount.
- Company B's shareholders might consider a lower offer.

Q. 6. (a) Technology forecasting is a crucial input in strategy formulation. Suggest the best method to forecast the technological changes with reasons and explain the method.

(b) Demand forecasting can be done using (i) Delphi technique, (ii) Time-series analysis and (iii) Regression analysis.Highlight the strengths of these techniques and also indicate the situations where these techniques would be relevant.

Answer 6. (a)

In the case of forecasting the technological changes, reliable data needed for one of the quantitative technique is not available. As such, the estimation is generic and is a subjective judgment, to be drawn through a process of statistical group response. Thus, for any long term technological forecasting at macro level, The Delphi technique is the best suitable method of obtaining expert opinion from a large group of people in a systematic way.

This technique has three attributes : anonymity, feedback and group response. The Delphi technique is a method of expert opinion from a large group of people in a systematic way. It is mainly required in any long term technological forecasting at macro level. In the Delphi :

- Direct interaction is avoided by using a programmed sequential questionnaires of three or four rounds;
- The expert is not called to defend his publicly expressed opinion, and anonymity of individual forecasters is maintained.;
- Subordinates do not have to differ with senior executives face to face;
- The final result is a statistical group response;
- Results are based on interactions combined with controlled feed back.

The final result is a statistical group response. This technique being a modification of the panel or committee approach eliminates the disadvantages of classical committee approach.

Answer 6. (b)

(i) Delphi technique : The Delphi technique is a method of expert opinion from a large group of people in a systematic way. It is mainly required in any long term technological forecasting at macro level. This technique is a modification of the panel or committee approach, while it eliminates some of the disadvantages, of the classical committee. In the Delphi :

- Direct interaction is avoided by using a programmed sequential questionnaires of three or four rounds;
- The expert is not called to defend his publicly expressed opinion, and anonymity of individual forecasters is maintained.;
- Subordinates do not have to differ with senior executives face to face;
- The final result is a statistical group response;
- Results are based on interactions combined controlled feed back.

(ii) Time series : This is a short term sales forecasting tool, useful only as a micro tool at the level of company product. The basis of such analysts is that the future value is a recombination of its past performance, at least into near-term future, by decomposition into the components of trend, cycle, season and erratic events. So this is useful only as a micro tool.

(iii) Regression : In this analysis also the past observations are described as a function of time and identified pattern is then used to forecast ahead. This method is often used for long-term forecasting. Being cause and effect models, it can only be used at the level of the industry. However, it is too easy and therefore encourages thoughtlessness; particularly in the long-term. A curve depending only on time cannot provide a suitable description of the distant future.

Q. 7. "The government as a segment may be regarded both as an aid and as an impediment to business". State your views.

Answer 7.

It is very true that the government, as a segment may be regarded both as an aid and as an impediment to business. Let us analyse the first aspect in detail.

Government as an aid to business :

(i) **Government as a buyer** – Government is generally regarded as an excellent customer by business as it is frequently the major purchaser of both goods and services. It normally purchases in bulk and do not default in making payment.

(ii) **Government as sustainer of R&D** – The cost of R&D necessary for development of new products and processes is sometimes beyond the financial capacities of individual companies. The Government frequently lends the helping hand by providing subsidies or even partially bearing the cost by directly participating in joint research.

(iii) **Government as protector** – This is usually in form of subsidies to the threatened industry , through erection of tariff barriers against foreign products: through imposition of quotas against foreign goods: and through exercise of preferential procurement practices.

(iv) **Government as an aid to controlling wage cost** – This takes the form of government policies, introducing income norms that ease the difficulties of business in meeting wage demands.

(v) **Government assistance in training** – Government sponsor training programmes aimed at raising the skill levels of existing and potential employees irrespective of trade and industry. Occasionally, there are also tax relief and grants are given to companies for running their own training schemes.

(vi) **Government assistance in starting up business** – In backward areas or non-industry areas, special facilities or concessions are given by government for setting up new industries. The government also sponsor various schemes to provide employment and general development in backward areas.

(vii) **Government as provider of new business opportunities** – Since the '80's there has been a general trend around the globe-favouring privatization of new industry. This automatically creates business opportunity for prospective investors.

Let us now examine the second aspect of this question .

Government as an impediment to business :

(i) **The development of the web of regulation** – Frequently, government increases its intervention in society through legislations and regulations. Often these work as detriment of the industries, increasing not only costs, but also procurement impediments.

(ii) **Government as a controller of prices** – Income policies of government are generally complemented with pricing policies, which are generally considered as hostile by the industry.

(iii) **Government as protector of environment** – Nations around the globe are becoming aware of the long term cost of industrial pollution. Governments have come out with a number of legislations that the industries resent as undue intervention.

(iv) **Government as guarantor of health and safety at workplace** – the concern for health and safety of workforce manifests itself through various acts and legislations invariably resulting in increased cost to the company and is often resented as undue penalty.

(v) **Government as guarantor of equal opportunity** – Legislation guarantying equal rights to employment and promotion irrespective of caste, religion and sex has been enacted in most countries. This is often viewed as undue interference and cost enhancing measures by business.

(vi) Government as defender of competition against monopoly – In order to maintain competition and protect small firms, the government often make legislation restricting monopolies. This may be good from social point of view but considered by big business houses as a negative step. This is particularly in the context of globalization when national monopoly is often considered as a prerequisite for global success.

(vi) Government as a defender of the right of consumers – Many western country's governments have legislation to protect the consumer against unscrupulous business practices. It may involve insistence of honest labeling of goods, contents of advertising, standardization of contents of pharmaceutical and food products and price regulation in the case of utility companies. The more extensive these laws are, the more hostile the business tends to become toward these.

From the above discussion, it becomes clear that government is seen to be performing both the above two roles simultaneously. However with liberalization the controls of Government have got diluted drastically.

Q. 8. M/s ABC Ltd., is a conglomerate that consists of five Stratetic Business Units (SBUs). Information relating to each SBU (and the market leader or the nearest competitor) is given below :

Current Market Share				**Expected Market Growth**
SBU	**M/s ABC Ltd.**	**Market Leader %**	**Nearest Competitor %**	
Tiles	**3**	**25**		**small**
Cosmetics	**1**	**6**		**nil**
Food products	**25**		**5**	**slowly declining**
Cattle feed	**0.025**	**0.5**		**high**
Software	**10**		**8**	**Rapid**

Required :

(a) Comment on M/s ABC Ltd.'s overall competitive position by applying the BCG Growth Share Matrix.

(b) Highlight the problems in using the BCG Growth Share Matrix.

(c) "A Dog (in respect of BCG matrix) need not be divested always. Some one can acquire a Dog." Comment.

Answer 8. (a)

BCG Matrix and competitive position :

SBU	**Relative Market Share**		**Growth Rate**	**Position**
Tiles	3/25 = 0.12	- Low	Low	Dog
Cosmetics	1/6 = 0.17	- Low	Low	Dog.
Food Products	25/5 = 5.0	- High	Low	Cash Cow
Cattle feed	0.025/0.5 = 0.05	- Low	High	Question Mark
Software	10/8 = 1.25	- High	High	Star

We get the following BCG Matrix :

Market Growth		Market Share: High	Market Share: Low
	High	STARS Software	QUESTION MARKS Cattle Feed
	Low	CASH COWS Food Products	DOGS Cosmetic, Tiles

Comments :

(i) Overall competitive position is not strong.

(ii) Only one SBU i.e., Software has High Growth rate.

Three SBU s i.e.Tiles/Cosmetics/Cattlefeed have low market shares. Of them, Tiles and Cosmetics can be categorized as 'Dogs' and may be consuming cash resources which could be better utilized in other areas.

(iii) Cattle feed SBU is a 'Question mark' and uses cash resources with the hope that it will become a star.

(iv) Food product's SBU is a cash cow and generates cash to finance future stars.

(v) At present, software SBU has cash generation potential.

To sum up, Mis ABC Ltd.'s future prosperity possibly depends on two SBUs: Software and Food products.

Answer 8. (b)

BCG Matrix- Problems :

(i) Defining market share and its exact boundaries are difficult.

(ii) Link between market share and profitability is questionable.

(iii) Simple High-Low classification does not take care of average growth/share categories.

(iv) Product lines or SBU s are considered in relation to one competitor. Fast growing small competitors are mostly ignored.

(v) Model assumes that the relationship between cash generation and market share is derived from the experience curve effect.

(vi) There are cases of Dog-category SBU having been taken over and turned into a flourishing unit by another company.

(vii) Labelling any SBU as Dog or Cash cow leads to low managerial motivation.

(viii) Market growth rate is only one aspect of industry attractiveness. There are other important aspects which also are to be considered.

Answer 8. (c)

Considerable criticism has been made for some time of the BCG's belief that "Dogs are essentially worthless" and they should be liquidated or divested, if possible. In some industries however, Dogs provide a platform for development of future stars, act as loss leaders or otherwise help to complete a product range. Dogs can also be acquired for strategic reasons-could be for tax planning, could be to kill competition etc.

Q. 9. (a) The sequence of strategies suggested by Ansoff is industry specific. Develop this sequence for two diverse industries like Insurance and Colour TVs keeping in mind the Indian market.

(b) Porter, in his 'Value Chain' model proposed some activities of an organization. What are those activities and their relationship between them?

Answer 9. (a)

The Ansoff's Matrix identifies 4 different kinds of Product market strategy that an Industry should adopt. These are Market Penetration, Market development, Product development and Diversification.

Market penetration involves trying to milk more from the existing products and existing markets. If the market as a whole is growing, this might appear a fairly low risk strategy to adopt. Where the market is stagnant, market penetration might involve market share at the expense of other players in the field.

Market Development uses existing products in new markets. This strategy might be attractive if the unit has to achieve high sales volumes-to utilise capacity efficiently. Product Development involves offering new products to the existing markets.

Diversification involves moving into new market with new product.

Ansoff model is a framework for discussing alternative directions. It is a model for identifying for product-market opportunities. There is no criterion for any choice amongst the strategies suggested by Ansoff. There is nothing to stop a company carrying out all the four strategies simultaneously, provided it has the resources. For example, a firm can pursue simultaneously a penetrating strategy in its existing markets as well as diversifying into new ones.

Insurance Sector : Insurance Sector is a on-going growing industry. Hitherto 'Life insurance Corporation of India' (LIC) had been monopolising this sector. But under the changed scenario, following liberalisation & Globalisation, a number of new players have come in and are posing a real threat to the Industry's Leader viz., LIC.

Further the market size of this Industry is very huge. There is lot of scope to develop many new products. The market is at a developing stage, with the Industry spreading out mostly across the urban and middle class income group.

The sequence of strategies as suggested by Ansoff for the Insurance Sector should be-

- Product Development
- Market Development
- Penetration and finally
- Diversification.

Product Development : Product Development involves offering new products to the existing markets. The scope for Product Development in this sector is tremendous and this should be accorded the top most priority. A lot of new ideas are fast filtering into our country from different countries abroad.

LIC should offer attractive new policies to its existing millions of clientele and thereby retain its numero uno status.

Market Development : Market Development is taking place because of the huge market size and the unawareness of people across the country, especially in rural areas about the product.

Market penetration : We are already noticing the huge market penetration that is taking place in the Insurance Sector. Market players are slashing the premium and are making attractive offers-specially to the rural folk by undertaking big publicity campaigns.

Diversification : Insurance biggies like Pru ICICI, Bajaj Aliianz, who are the two top private sector players have already diversified into new areas like Mutual Fund etc., To sum up, Ansoffs model has a lot of relevance for the Insurance Sector. All the strategies., as suggested by Ansoff, are being put into play, as per the sequence suggested above.

Colour TV industry :

Colour TV came into the market for the first time during The Asian Games, 1984. Before that only Black and White TVs were available. In the language of Strategic Management, we can say that the product 'Black& white TVs' were in the Maturity Phase of Product Life Cycle, whereas the Colour TVs had just been only in the 'Introduction' Phase.

The sequence of strategies as suggested by Ansoff for the Colour TV Industry should be-

- Market Development
- Penetration
- Product Development and
- Diversification.

Market Development : The Market Development for the Colour TVs industry has been growing exponentially in view of a no. of new TV channels that are entering the Indian market specialising in different areas like Sports channel, Entertainment channel etc. , With the introduction of some populist measures taken by some state Government in the«south, by distributing TV s for the poor and the under-privileged communities the market has suddenly got 'heated up'. Due to the stiff competition, the prices have also tumbled down for a Colour TV. The market for Black& White TV has almost come to a 'Zero' level. Every one are now going crazy for a Colour TV.

Market penetration : Market Penetration is going on at a feverish pitch, due to the emerging new technology like LCD, Plasma etc.

Product Development : Product Development has assumed a special significance for the Colour TV industry. There is a huge stress on quality. The final result as a consequence is a squeeze on profit margin, due to market penetration.

Diversification : Diversification to other areas related to shopping goods are taking place. Many players are moving into new products like Home Theatres, Refrigerators etc.

Summing up, Ansoffs-model has a lot of relevance for the Colour TV industry. All the strategies, as suggested by Ansoff, are being put into play, as per the sequence suggested above.

Answer 9. (b)

The value of an organization depends upon the activities of the oranization. The activities of an organization can broadly classified under two heads, namely-Primary Activities and Secondary Activities.

Primary Activities : Primary Activities comprises of the primary or the basic activities of a firm. These activities adds value to the firm i.e., It represents all those activities which are involved in converting an input into a finished product and subsequent sales and after sales service. All such primary activities affect the value of an organization. Some of these Primary Activities are as listed below :

1. **In bound logistics** – This activity involves the reaching of the raw materials to the place of production from the stores. It includes activities like receiving, handling and storing inputs to the production system.

2. **Operation** – involves all those activities connected with converting the resource inputs into final output like Product Planning and development, Product Process development, Product line and Product mix decisions, Lay out Planning, etc.,

3. **Outbound logistics** – This activity represents the distribution of finished products, storage, warehousing, transportation, channel of distribution, branding, packaging, containerization, inventory management, etc.,. There are varied scopes in this activity to reduce cost, attaining delivery schedule, meeting demand at the right time and at the right place.

4. **Marketing and sales** – This activity involves informing customers about the product, persuading them to buy it, and enabling them to do so. Marketing activities encompasses different kinds of routes like advertis-ing, sales promotion, personal selling, etc., The best method should be adopted to create value to the potential customers.

5. **Various after sales services activities** – like, installing, repairing products, providing spares etc.

Support Activities : The above mentioned primary activities are supported by the following activities called the Support Activities, which are as enumerated below :

1. **Procurement** – The Supply Chain Management' is becoming more and more popular these days. Sourcing or procurement should be from the best available sources, keeping in mind that the value is passed to the consumers right from there, acquiring the resource inputs for the primary activities.

2. **Technology** – Keeping in pace with the up to date technology is another main activity. This will result in offering better products at low cost to the customers. Further adoption of latest technology will go a long way in product design and improving process and / or resource utilization.
3. **Human resources development and management** – includes activities like-recruiting, training and rewarding people. Machine, Money and Material cannot function without the active support and involvement of 'Men'. Human Resources is an integral support function. Identifying the strengths and weaknesses of the individuals and motivating them will result in a very efficient functioning of the firm.

4. **Firm infrastructure** – concerns the systems of planning, finance, etc. which are crucially important in all primary activities. Further the infrastructure of the firm should ensure that the production activities are carried out smoothly and the workers are at their best of performance while working.

Both the primary and support activities are interlinked to each other.

Linkages between the activities connect the interdependent elements of the value chain together. One element affects the cost or effectiveness of another. The element of 'Margin' (the excess of amount that a customer pays over costs of resource inputs and value activities) provides the final linkage. Technology, Procurement, HR, Infrastructure effects the quality of the product. On the other hand, the product quality, price etc., affect the infrastructure/linage of the firm.

These are so interlinked that one's doing will have a great impact on the other. All these in combination comprise the value chain model.

Q. 10. (a) A Corporate Strategic Analyst uses (a) Sensitivity Analysis; and (b) Simulation, to understand the long-term financial impact on the organization. Discuss the pros and cons of above two methods.

(b) Identify the different factors about which firms can become complacent at each stage of the life-cycle and the dangers that this can pose.

Answer 10. (a)

Sensitivity analysis is a method of systematically determining the effect which, different values of decision parameters (i.e. the key variables in a decision model) will have on the decision criteria (i.e. the ultimate expected output). In building up a decision model, estimates are made of the various relevant factors, all of which are subject to variations and each such variation will have an impact on the final expected outcome of the decision. The impact of each variation will, however, be different and some of the estimated factors would be more sensitive to the variation than others. By bringing out the effects of each variation separately on the output, the method of sensitivity analysis determines the answer to “what if” problems. Sensitivity analysis would assist the management in finding out the impacts of all possible variations and would take care of the sensitive areas. A decision problem would usually consist of innumerable key variables built into complex mathematical model. But with availability of facility of computer the working out of sensitivity analysis can be applied to all mathematical models for analysing the risk in short term decision opportunities. If an exercise has to be meaningful to provide a reliable basis for decision making the dangers of risk and uncertainty must be reduced to the minimum, if not eliminated. It is, therefore, necessary to undertake a systematic exercise in sensitivity analysis. Sensitivity analysis is an useful technique for incorporating the assessment of risk during strategy evolution. For example, the key assumptions underlying a strategy might be that

- there will be a 7% growth in market demand
- there will be no industrial unrest in the company
- there will be 85% capacity utilisation

In this case the sensitivity analysis would aim to find out the effect on performance in case

(i) market demand grow by 5% instead;

(ii) market demand grow by 12% instead; and

(iii) likelihood of lesser capacity utilization.

Thus sensitivity analysis would help the management to develop a clear picture of the risks of making a particular strategic decisions.

Simulation is a method of solving decision making problem by designing, constructing and manipulating a model of the real system. It is useful technique to solve a business problem when many values of the variables are not known or partly known in advance and these is no easy way to find these values. It is a quantitative technique that uses a computerised symbolic model to represent actual decision making under an certainty.

The limitations of Simulation Technique are :

- The simulation technique does not generate optimal solutions to problems like other quantitative techniques. It is a trial and error approach that may provide different solutions in repeated runs.
- It is often a long and complicated process.
- Simulation technique by itself do not generate a solution but it would indicate a way of evaluating solution
- Some situations are not amenable to simulation.
- Simulated results are not precise and at time it is not possible to assess the extent of error in simulated solution.

Answer 10. (b)

At the introductory stage, complacency can arise about the industry’s prospects. There could be speculation that growth and riches are just around the corner. Firms in the Industry sometimes may over-estimate the benefits it brings vis-à-vis established substitutes. They might under-estimate the technological hurdles to be overcome in order to make their product acceptable.

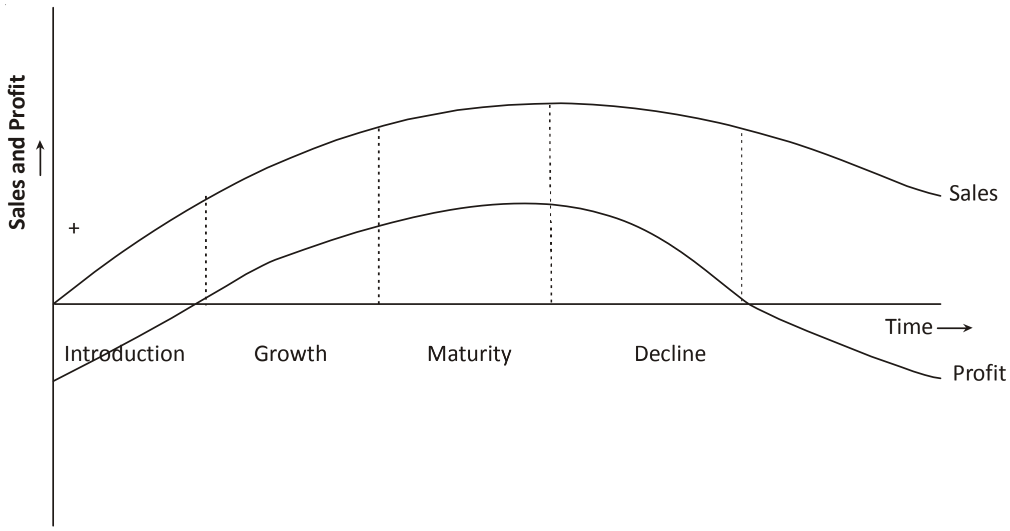
All of these can lead to poor decisions about investment in enhancing product features or extending the range of offerings and underinvestment in marketing and in building relational capital.A firm may be confident about the novelty of the offering and may not create enough awareness and pull amongst the target customers.

At the growth stage, firms may become complacent about their capacity to sustain growth and to fulfill stakeholder expectations. They may become acclimated to high levels of annual growth and assume that these can be maintained for ever. This may lead to overly optimistic investments in new capacity towards the end of the growth phase.

Firms may also be complacent about their ability to locate, attract and train staff with appropriate qualifications and motivation assuming that this will continue to be as easy as it is today. This may lead to capacity constraints and to the erosion of margins as firms competent to attract people from a limited pool of talent.

At the maturity stage, complacency can set in about the likelyhood of technological change, leading firms to over-invest. They may also be complacent about the degree to which the customers are tied into their offerings. Leading firms may become complacent about their leadership position and underestimate competitors' capacity to instigate disruptive, perhaps even hyper-competitive change. Finally, firms may become blind to the possibility of eventual industry decline and make poor investment decisions.

At the decline stage, firms may become complacent about the eventual eclipse of the industry and the pace at which it occurs.



Q. 11. (a) One major route to competitive advantage and hence profitability is market share. Identify the sources in following this route.

(b) Discuss the role of Product development as a part of an overall marketing strategy.

Answer 11. (a)

Market share is the percentage of a business firm's sales relative to the combined sales of all competitors in a given market.

Major sources of competitive advantage through market share approach are :

(i) Economies of scale

(ii) Experience and

(iii) Market power

(i) **Economies of scale is dependent on three factors :**

– Specialisation

– Automation

– Vertical integration.

As long as a business firm increases its scale of operations within a range of optimally lowest unit cost, it can gain a competitive advantage over its smaller rival firms, operating at higher points along the economies of scale.

(ii) **Experience :** This is dependent on the following three factors :

– Employee learning

– Product improvement

– Process improvement

An experience that provides an opportunity to reduce costs significantly is strategically important in the early stages of an Industry's evolution. Experiences as to operations/processes/products are vital.

(iii) **Market Power :** This is possible through the implications of Price and Investment. Market leaders are frequently able to charge systematically higher prices than their smaller rivals. Market leaders can normally make additional investments, whenever necessary, in the areas of technology, research and development.

Answer 11. (b)

Product development involves an organisation seeking to create new products to replace existing ones. The new products may be completely new or revised versions of existing ones.

Within a marketing strategy, a company's competitive posture is determined by its overall product-market mix and product development strategy is a part of this. Many firms attempt to have a combination of current and new products for survival and growth.

The strategies of market penetration, market development and diversification are also coordinated with the strategy of product development. For an overall marketing strategy, a company will attempt a mixture of these strategies.

As a part of an overall marketing strategy, product development performs the following roles :

- Replacement of products, which are in the maturity of PLC.
- Risk reduction through production of a range of products.
- Brand extension
- New markets' entry, etc.

Q. 12. (a) Why distribution function is referred as the most crucial part of Marketing Management? Also, discuss the various factors influencing logistic choice.

(b) What is the basic premise behind market segmentation? What are the criteria for effective segmentation?

Answer 12. (a)

Peter Drucker has described distribution as industry's Dark Continent. Distribution or placement is the most crucial part and an important function of marketing. Between the producer or manufacturer and the consumer or the end user there are a number of intermediaries or middlemen who ensure a smooth flow of goods and services. They are commonly called distribution channels. Place as an element in the marketing mix is largely concerned with the selection of distribution channels and with the physical distribution of goods. The distribution of goods from the producer to the end user varies according to the nature of goods.

While the increasing distribution costs have been causing concern to many marketing executives and have also affected the consumer by way of increased prices, systematic efforts towards containing these costs are practically absent in India. One reason for this could be that the executives are not aware of the interplay of the complex factors in the logistics of distribution and constantly they are unable to maneuver or manipulate these factors.

Various important duties performed by distribution are inter alia :

- Bringing buyers and sellers into contact;
- Offering a sufficient choice of goods to meet the needs of buyers;
- Persuading customers to develop a favourable opinion of a particular product;
- Storage and transportation of goods from the manufacturing point to the consumption point;
- Maintaining an adequate level of sales;
- Maintaining an acceptable price;
- Providing appropriate services (e.g. credit, finance, after sales-services, customer-servicing, complaint-handling etc.)
- Market intelligence and feedback collection;

The first task of the distribution channel management is to develop a pathway or team/network of merchants and agents business institutions for the flow of goods and services from the point of production to the point of use. The actual movement and handling of goods with value addition is the second task of the channel operations (logistics). In its original use, logistics was a military term referring to a complete system of moving, supplying and quartering troops. Businessmen broadened logistics to include any type of transportation and storage. Marketers applied the term to mean the physical handling of products. They also began employing the term physical distribution in place of logistics. General factors affecting logistics choice are :

- Need for specialists- for private logistics, it cannot find/arrange /afford better use of public ware houses and carriers that are specialists.
- Capital- must be sufficient to start and manage private logistics effectively.
- Control- assurance that the logistics is performed as desired and results into quick and safe deliveries. Nothing like private, if one can afford.
- Manageable preference.
- Operating cost
- Product
- Customer characteristics - desire for speed and services; tolerance for delays; incorrect shipments, damage etc.

Answer 12. (b)

Market segmentation is the division of a market into fairly homogenous subsets where each subset can be chosen, reached and served by its own tailored marketing mix. Each such homogenous subset is made up of people with approximately similar needs and aspirations which distinguish them from other subsets. Segmentation applies to the personal customer market and the business market.

The criteria for effective segmentation are: measurability; accessibility; action ability; substantiality.

Different variables are used to segment consumer markets. The variables fall into two broad categories : consumer, characteristics and consumer variables. The major segmentation variables are :

(i) **Geographic :** Region, City, Density, Climate.

(ii) **Demographic :** Age, Gender, Family size, Family life cycle, Income, occupation, Education, Religion, Race, Nationality.

(iii) **Psychographic :** Social class, Life style, Personality.

(iv) **Behavioral :** Occasions, Benefits, User status, User rate, Loyalty Status, Readiness stage, Attitude towards product.

Factors determining the validity of a market segment are : size, measurability, response, access and profit.

Q. 13. (a) Write a critical note on the Profit Impact on Marketing Strategies (PIMS)

(b) State the factors to be considered while pricing a new product.

Answer 13. (a)

PIMS analysis attempts to establish the profitability (i.e., return on capital) of various marketing strategies. PIMS researchers, based on their analysis of database of, at least, 3000 firms, believe that 70% of the relative profit performance of an organisation, when compared to similar business, derives from the areas of competitive strength, market attractiveness and productivity.

A research study in the USA found that there was a positive correlation between market share and return on investment so that companies with higher market share earned high returns. Three possible reasons were put forward for this correlation.

(i) **Economies of scale :** It enables a market leader to produce at lower unit costs than competitors and so make bigger profits.

(ii) **Bargaining power :** A strong position in the market gives a firm greater strength in its dealings with both buyers and suppliers.

(iii) **Quality of management :** Market leaders often seem to be run by managers of a high calibre.

However, low market share does inevitably mean poor returns. If this were so, small firm would always make low returns and this is simply not true. A company can prosper with a low market share in the following ways:—

- Market segmentation : New market segments might be a small proportion of the total market, but profitable;
- Emphasizing product quality and charging higher prices;
- Wanting to stay small and consciously avoiding growth;
- Cost control.

Businesses can also earn good profits with a low market share in a low growth market in the following circumstances :

- The market is stable;
- Product innovations are rare;
- Most products are standardised:
- Companies produce supplies or components for industrial customers and have built up a close working relationship with these customers,
- Repeat buying is frequent,
- The value added to sales ratio is high.

Finally, some firms are prepared to sacrifice profitability for market share over a period of time Some Japanese firms were willing to charge low prices to buy market share and totally weaken the competitors whose products were not as deep.

There are practical difficulties with PIMS research which might raise questions about the usefulness. These are as follows :

- Identifying each market segments properly - an up-market producer is in a different market segment than to a down-market cheap goods producer and it would be wrong to classify them as competitors in the same market.
- Measuring the actual size of the market and so the company's own market share in proportional terms;

- Establishing what returns are available from a particular market share.
- It has also been argued that PIMS analysis is more relevant to industrial goods markets, where the correlation between high market share and high returns is not so strong.

Answer 13. (b)

There are three elements in the pricing decision for a new product.

- getting the product accepted
- maintaining a market share in the face of competition
- making a profit from the product.

When a firm launches a new product on to the market, it must decide on a pricing policy which lies between the two extremes of market penetration and market skimming.

Market penetration pricing is a policy of low prices when the product is first launched in order to gain sufficient penetration into the market. It is therefore a policy of sacrificing short-term profits in the interests of long-term profits. The circumstances which favour a penetration policy are as follows:—

- The firm wishes to discourage rivals from entering the market
- The firm wishes to shorten the initial period of the product's life cycle, in order to enter the growth and maturity stages as quickly as possible.
- A firm might therefore deliberately build excess production capacity and set its prices very low; as demands build up, the spare capacity will be used up gradually, and unit cost will fall; the firm might even reduce prices further as unit costs fall.
- In this way, early year losses will enable the firm to dominate the market and have the lowest costs.

Market skimming. The aim of market skimming is to gain high unit profits very early on in the product's life.

(i) The firm charges high prices when a product is first launched.

(ii) The firm spends heavily on advertising to win customers.

(iii) As the product moves into the later stages of its life cycle progressively lower prices will be charged. The profitable cream is thus skimmed off in progressive stages until sales can only be sustained at lower prices.

(iv) Conditions which are suitable for such a policy are as follows :

- Where the product is new and different, so that customers are prepared to pay high prices so as to be 'one up' on other people who do not own one.
- Where demand elasticity is unknown. It is better to start by charging high prices and the reducing them if the demand for product turns out to be price elastic.
- High initial prices might not be profit-maximising in the long run, but they generate high initial cash flow. A firm with liquidity problems may prefer market-skimming.
- Skimming may also enable the form to identify different market segments for the product, each prepared to pay progressively lower prices. If product differentiation can be introduced, it may be possible to continue to sell at higher prices to some market segments.

(v) The firm may lower its prices in order to attract more price-elastic segments of the market; however, these price reductions will be gradual.

Introductory offers may be used to attract an initial customer interest. Introductory offers are temporary price reductions, after which the price is raised to its normal commercial rate.

Q. 14. (a) While pioneers generally enjoy certain advantages, sometimes , the crafty imitators or the later entrants too, enjoy their share of benefits after a pioneer's successful entry. In view of the above :

(i) List the advantages enjoyed by the pioneers.

(ii) Identify the benefits, the imitators or later entrants may enjoy.

(iii) Discuss some successful strategies taken by such non-pioneers in India.

(b) Differentiate between :

(i) Products & Brands

(ii) Above-the-line & Below-the-line Advertising.

Answer 14. (a)

(i) A pioneer is defined as a firm which introduces a product or service in the market and sells it successfully. An imitator is one who copies at least some feature of the pioneers' product and a late entrant is one who enters the market after a pioneer's successful entry.

A pioneer bears the risk. At the same time it is the beneficiary of a number of advantages that are not available to the late entrants. The advantages enjoyed by the pioneers are listed below :

Advantages	**Pioneer**
Image and reputation	Enjoys positive image fused with innovativeness and progressiveness.
Brand loyalty	Has the opportunity to establish its brand as the lead brand, leading to long term market share advantages.
Opportunity to pick the best market position	Has the first opportunity and can pre-empt the most favourable market position before the later entrants enter the market.
Technological leadership	Can have a head start in technology and can even pursue the next technological generation.
An opportunity to set product structure	Can set industry standards in terms of their own products.
Access to distribution	Can ensure that their products have access to preferential distribution.

(ii) Benefits enjoyed by imitators /later entrants :

(I) They can clearly avoid products that have no potential-by sitting back and watching.

(II) They can decide to enter the market if and when it is favourable, thereby reducing costs and risks of product failures.

(III) Imitation is always less expensive than innovation. It avoids many of the start-up costs that must be borne by the first entrants. The pioneer, for example is forced to spend heavily on research and development and on educating consumers while non-pioneers need not.

(iii) The later entrants have an opportunity to benefit from market changes. Certain products are not fully formed when they are first brought to the market and the market is also poorly formed. The later entrants stand to gain from under such circumstances.The imitators and the later entrants generally use the following successful strategies. A combination of these is also seen to be adopted :

(I) **Low price penetration strategy :** Low price strategy is the most popular and successful of all the imitation strategies. A example of such a strategy causing the pioneers downfall is seen in the case of Melmoware, a generic name in durable crockery to others, e.g. Sunware, Superware.

(II) **Imitate and improve strategy :** Some imitators succeed being second but better. Such later entrants neither seek to imitate the pioneers 'product nor do they compete on the basis of lower prices. Their strategy is to improve upon the pioneers' design and gain consumer preference. This strategy is evident in the thermoware market where Milton and Cello have surpassed Eagle Industries Ltd. which was the pioneer.

(III) **Market power strategy :** Pioneers, it is believed, erect impenetrable entry barriers that keep imitators at bay. But when matched against imitators' sheer market power by virtue of being well established industry giants whose existing products are challenged, these barriers weaken. The imitators in this case may not have the foresight of their smaller but quicker moving challengers, but when they decide to move into the market, they do so with unparalleled strengths that overwhelm the pioneer. This strategy was used by Telco (the market giant in the heavy commercial vehicle equipment) to enter in the light commercial vehicle market.

(IV) **Conscious parallelism strategy :** Common in capital –intensive homogeneous product industries, e.g steel, fertilizers and chemicals.

Answer 14. (b)

(i) **Products & Brands :** A product can be defined as something which is offered to a market in order to satisfy customer needs in some way: it is a package of benefits. A brand, on the other hand, is rather different: it is a name, term or symbol or design or combination of them which is intended to signify the goods and services of one seller or group of sellers and to differentiate them from those of competitors. For examples, denim jeans, the product, underpin a number of brands, e.g. Wrangler, Lee, and New Port. These brand names do not only apply to jeans and can be found also on shirts.

Sometimes, it has been argued that products have life cycles whereas brands do not. But, this statement is a false dichotomy. This model applies to some products but not to all. On the other hand, some products do not have a life cycle, although some stages of the life cycle model still apply. With brands, the situation is equally ambivalent. Some brands appear immortal, despite the changes in the products they support. On the other hand, some brands do die, if they are not properly supported.

(ii) **Above-the-line & Below-the-line Advertising :** Above-the-line advertising is in its normal or popular sense — e.g. T.V. or radio commercials, poster ads, newspaper and magazine advertisement. Below-the-line advertising is the sales promotion activities — i.e. 'non-media' advertising. Though, to a large extent, advertising and sales promotion are complementary and sales promotion is used often as a means of reinforcement for bringing a media campaign closer to the customer, a distinction is often sought to be made between them. Advertising is effective product positioning through u.s.p. It is, therefore, commonly associated with mass media. The general role of sales promotion is persuasive communication. Basically, the task of sales promotion comprises stimulating customer buying and distribution effectiveness. Accordingly, sales promotion is short-term more specific and focussed and talked about including immediate purchase.

Q. 15. Write short notes on :

(a) Core competence.

(b) Business process re-engineering.

(c) Strategic cost analysis in marketing.

(d) Cost leadership vs. Cost reduction.

Answer 15. (a)

Core Competence : Prahlad and Hamel, in impressing the importance of invisible resources in global competition, have introduced the impressive concept of core competency. Core competencies are the collective learning in organisations, especially on how to coordinate diverse production skills and integrate multiple streams of technologies. The philosophy behind the concept is simple and can be linked to a tree. The diversified corporation is a large tree. The trunk and major limbs is core products, the smaller branches are business units; the leaves, flowers and fruits are end products. The root system that provides nourishment, sustenance and stability is the core competency. It thus involves not only harmonising streams of technology but is also about the organisation of work and delivery of value. The force of core competency is felt as decisively in services as in manufacturing.

It is also communication, involvement, and a deep commitment to working across organisational boundaries. The skills that together constitute core competency must coalesce around individuals whose efforts are not narrowly focused that they cannot recognise the opportunities for blending their functional expertise with that of others in new and interesting ways. Because core competency does not diminish with use, it needs sustenance and nurturing on a long- term basis suitably backed by appropriate vision on the part of the top management.

Answer 15. (b)

BPR has been defined as fundamental thinking and radical design of business procedures to achieve dramatic improvement in critical contemporary measures of performance, such as cost, quality, service and speed.

(i) **Fundamental :** We must ask ourselves the basic question about

- How we operate?
- Who we do?
- What we do now?

Re-engineering first determines what a company must do to survive and flourish, then how to do it.

(ii) **Radical :** Radical design means essentially ignoring and discarding existing ways and means of achieving results.

(iii) **Dramatic :** Marginal improvements need only fine tuning. Re-engineering calls for banishing the old and replacing it with something new.

Answer 15. (c)

Strategic cost analysis in marketing : Cost analysis with reference to marketing relate mostly to the traditional approaches and some modern approaches too. The discipline called strategic cost management has the important tenets of total cost management, activity based costing, value chain analysis etc.

According to Porter (Competitive Strategy), industry's profitability is a function of the collective strength of five competitive forces, bargaining power of suppliers, bargaining power of buyers, the threat of substitutes, the entry of new competitors and the rivalry among the existing competitors. These five forces determine the industry's profitability because they influence the prices, cost and required investments of firms in an industry. Cost analysis oriented towards strategic advantages should therefore address all these five areas.

Answer 15. (d)

Cost leadership vs. Cost reduction : Cost is the greatest and the most enduring competitive advantage for the long-term success of any product or service. Cost leadership, i.e. enjoying the lowest costs often translates into market leadership, allowing a company to dictate terms in the market place. There are five major variables which influence cost leadership. They are: output level, factor prices, factor productivity, technology and size of the unit. Obviously, the cost tends to be the lowest for a firm with the highest output levels; the lowest factor prices; the highest factor productivity; the right and relevant technology; and an economically optimum size.

No cost is at a level that it cannot be cut and reduced. Cost cutting and reduction is an important exercise which should be periodically undertaken in every enterprise. The areas of cost reduction can be classified as: raw material and inventory costs; manufacturing costs; labour costs; finance costs; marketing costs; R&D costs; general administrative costs. However, these areas are a brief outline only. Many more operational areas of cost reduction can be identified. Cost reduction is not a one-shot exercise. One should keep at it continually and vigourously, practically, all the time. Otherwise, costs have a natural tendency to rise. On their own, they will never come down. One must continually push them down. Believe that cost can always be cut. They must be cut.

Once one acquire cost leadership, one's survival in the market place is better assured. Try competing with Bajaj Auto in scooters, with Raymonds is worsted suiting, then one will know what it means to be a market leader through cost leadership. The task is formidable.

Q. 16. (a) To gain competitive advantage a company may pursue Cost Leadership, Differentiation and Focus strategy. Describe each of these strategies and indicate how each will result in competitive advantage.

(b) State the problems associated with rural marketing in India.

Answer 16. (a)

'Competitive Advantage' refers to the route taken to serve the market or segment through pursuing Cost Leadership, Differentiation and Focus strategy.

Cost Leadership Strategy : Under this strategy a company tries to outperform competition by producing at cost lower than others. Typically the cost leader will be able to withstand competition better because of its lower cost and could earn same level of profit even by charging a lower price than its competitor. The overall goal of cost leader is to increase efficiency building in manufacturing process, materials management, achieve economies of scale . Their R& D units try to make process improvements to lower cost of manufacturing, they may try to obtain larger size of order and utilize own captive sources of raw materials/utilities.

Differentiation Strategy : A differentiation strategy attempts to make the product in terms of attributes which are desirable to the customer, including customer service. The assumption is that competitive advantage can be gained through the particular characteristics of a firm's products. With a successful differentiation strategy, loyalty to the firm's products will build up and customers are not so price-sensitive. So a firm may charge premium price. At times such offerings become a status symbol in terms of customers' psychological make up.

Focus Strategy : A focus strategy is based on segmenting the market and targeting particular segments instead of trying to serve the entire market with a single product. A focused company is a specialized differentiator or cost leader. It tries to cater to limited number of customers, particular market niche, defined by type of customers, geographic location of the market or type of product offering.

A firm choosing to compete across a broad market determines that it should compete in number of customer segments. Competitive advantage is achieved either by offering unique products- *a differentiation strategy* or by establishing a *low-cost* position and providing standardized products at the lowest competitive price-a *Cost Leadership* Strategy . Firms that choose to compete in narrow customer segments select a Focus Strategy, which may either be a *differentiation focus* strategy (few segment, unique products) or a *cost focus strategy* (narrow segment, standardized products at lowest competitive price.)

According to Michael Porter, a firm *must* choose between these strategies. Otherwise, it will get stuck in middle of competitive market place with no competitive advantage and will be doomed to perform "below average".

Answer 16. (b)

The main problems arise due to :

(i) vastness in size (nearly 6 lakh no. of villages) How to reach there?

(ii) too many languages and low literacy rate. It is difficult to choose an optimum communication mode;

(iii) large variation in purchasing power makes price selection difficult.

Q. 17. (a) What do you understand by Strategic Total Cost Management?

(b) Discuss the ways by which companies can achieve a cost advantage by reconfiguring their value chains.

Answer 17. (a)

Strategic Total Cost Management is a new world-class approach to Cost Management. So long cost was classified under 3 heads - as variable, semi-variable and fixed. When cost as a strategy is to be implemented, it presupposes that there is a time horizon, which is longer than a few accounting periods. In such a time-span, even the so-called fixed costs tend to vary e. g., rent, taxes, salaries, etc., So, the total cost management strategy has evolved a new classification namely,

Bed rock Fixed Costs e.g., depreciation, patent, amortization, etc., Managed Costs-like rent, taxes, salaries, maintenance, advertising, etc., Truly Variable Costs-like materials, royalties, freight, overtime cost, etc.

The above classification helps in arriving at Break-even points, which are more credible and take into consideration the changes in the costs over a period. A single break even is not possible and not acceptable in the Total Cost Management.

Another very important feature of Total Cost Management is that almost all costs are manageable through cost strategy as even period costs tend to vary over time. For instance, rents, which are considered as fixed cost under normal parlance are treated as, managed costs in Total Cost Management Strategy. This is particularly so, because the quantum of rent variation can be managed through leasing, tax-planning etc.

Introduction of Strategic Total Cost Management can embrace many different areas in business and as such there are specific tools to be employed for the implementation as follows :

- Enterprise wide cost system,
- Production Cost System,
- Marketing Cost Management,
- Support Cost Management,
- Transformation Cost Management

Strategic Total Cost Management emphasizes that enduring cost benefits will accrue to a company only when the organisation aligns its information systems to its strategic goals. ERP (Enterprise Resource

Planning) concept stems from this tenet and introduces automation in areas where the human intervention may not be so efficient but more costly.

Answer 17. (b)

Dramatic cost advantages can emerge form finding innovative ways to restructure processes and tasks, cut out frills, and provide the basics more economically. The primary ways companies can achieve a cost advantage by reconfiguring their value chains include :

- Simplifying the product design
- Stripping away the extras and offering only a basic, non-frills product or service, thereby cutting out activities and cost associated with multiple features.
- Re-engineering core business processes to cut out needless work step, and low-value added activities.
- Shifting to a simpler, less capital-intensive or more streamlined technological process.
- Finding ways to bypass the use of high-cost raw materials or component parts.
- Using direct-to-end-user sales and marketing approaches that cut out large costs and margins of wholesalers and retailers.
- Relocating facilities closer to suppliers, customers or both to curtail inbound & outbound logistical costs.
- Achieving a more economical degree of forward or backward vertical integration, relative to competitors.
- Dropping the something for everyone approach and focusing on a limited product/ service to meet a special, but important, need of the target buyer, thereby eliminating activities and costs associated with numerous product versions.

Q. 18. (a) Explain the factors that should be considered when setting the advertising budget.

(b) Bring out the difference between 'Marketing' and Societal Marketing' concepts. Why is the latter so important?

Answer 18. (a)

There are a number of factors which deserve consideration before a company fixes up/sets up its budget for advertisement of its product. These are as follows:

(i) The Scale of Production.

(ii) The Plant Capacity.

(iii) The availability of the Working Capital.

(iv) *Competition in a market* : Where there is an intense competitive and high advertisement spending, a brand will need to advertise more heavily.

(v) *Product substitutes* : Brands in a commodity class like Soft drinks, Cigarettes etc will require a heavy advertising to establish a differential image.

(vi) *Stage in the product life cycle* : New products will typically require large budget to gain consumer awareness. Established products require lower budgets.

(vii) *Advertising frequency* : Based on the number of repetitions needed to put across the brands' message to consumers, the firm will decide on the Advertising frequency, which in turn, will affect Advertising Budget.

(viii) *Market share and consumer base* : High market share brands usually require less advertising expenditure as percentage of sales to maintain share. To build share by increasing market size requires larger expenditures. On a cost –per-impression basis, it is less expensive to reach consumers of widely used brand than to reach consumers of low share brands.

(ix) *Routine advertisement or campaign advertisement* : The advertisement budget will depend on issues like- whether the advertisement is going to be a routine advertisement or whether it is going to be a campaign advertisement. Further the amount of expenditure will vary depending on the type of campaign.

Apart from the above, there are number of other factors, as listed below, which merit consideration while planning for Advertisement Budget like :

- How much money the Company can afford to spend?
- How much % of the total sales revenue shall be spent on advertisement?
- How much the competitors are spending?
- What will be the media to be used for Advertisement like newspaper, Magazines, T.V. , Radio, Hoardings on a high-way, short films?

Answer 18. (b)

The marketing concept is a business philosophy that believes that the customer's satisfaction is the reason for the business's existence. The marketing concept holds that achieving organisational goals depends on the needs and aspirations of the target consumers and delivering the desired satisfactions more effectively and efficiently than competitors do.

The marketing concept starts with a well-defined target market, focuses attention on understanding those customers' needs, co-ordinates all the marketing efforts by creating long-term customer relationships based on customer value and satisfaction. Under such marketing concept, companies produce what consumers want, thereby satisfying consumers and making profits.

The societal marketing concept holds that a company should make good marketing decisions by considering consumers' wants, the company's requirements, and society's long-term interests. It is closely linked with the principles of Corporate Social Responsibility and of Sustainable Development.

The concept has an emphasis on social responsibility and suggests that for a company to focus on exchange relationship with customers might not be in order to sustain long-term success. Rather, marketing strategy should deliver value to customers in a way that maintains or improves both the consumer's and the society's well-being.

The societal marketing concept holds that the organisation should determine the needs and interests of target markets. It should then deliver the desired satisfactions more effectively and efficiently than competitors in a way that improves the consumer's and the society's well-being.

Importance of societal marketing concept :

The societal marketing concept is a new marketing philosophy. It is important because it not only encompasses all activities that ensures delivery of what the customers want, but also ensures that the rights of the society are not infringed while delivering to customers who form a particular segment of society.

Most companies recognize that socially responsible activities improve their image among customers, stockholders, the financial community, and other relevant publics. Ethical and socially responsible practices are simply good business, resulting not only in favourable image, but ultimately in increased sales.

The societal marketing concept questions whether the pure marketing concept is adequate in an age of environmental problems, resource shortages, world-wide economic problems and neglected social services. It asks if the firm that senses, serves and satisfies individual wants is always doing what's best for consumers and society in the long run.

According to the societal marketing concept, the pure Marketing concept over-looks possible conflicts between short-run consumer wants and long-run consumer welfare.

Section II : Risk Management

Q. 19. (a) "Risk Management Strategies are seven fold". Identify them and briefly discuss them.

(b) Why is Risk Reporting considered to be an important step in Risk Management?

Answer 19. (a)

Risk Management strategies are seven-fold as follows :

- Avoid Risk
- Reduce Risk
- Retain Risk
- Combine Risk
- Transfer Risk
- Share Risk and
- Hedge Risk.

A brief on them are as follows :

(i) **Avoid Risk :** This is prevention and a proven strategy. This strategy results in complete elimination of exposure to loss due to a specific risk. It may involve avoidance of an activity, which is risky. This strategy can be approached in two ways :

Do not assume risk : This means that no risky projects are undertaken, e.g., Government has clearly mandated that no hazardous chemical industry can be put up near a populated area. This is a proactive avoidance.

Discontinuance of an activity to avoid risk: Abandoning a project to avoid risk midway is a decision sometimes taken while handling the project.

(ii) **Reduce Risk :** This strategy is attempted to decrease the quantum of losses arising out of a risky happening e.g., earthquake, storm, floods ,etc, Risk reduction can be achieved through :

- Loss Prevention (e.g. Burglar Alarm) and
- Loss Control (e.g. Using Fire Extinguisher)

(iii) **Retain Risk :** Risk Retention is adopted when Risk cannot be avoided, reduced or transferred. It can be a voluntary or involuntary action. When it is voluntary, it is retained through implied agreements. Involuntary Retention occurs when the organization is unaware of the risk and faces it when it comes up.

(iv) **Combine Risk :** When the business faces two or more risks, the overall risk is reduced by a combination. This strategy is prevalent mainly in the area of financial risk. Different financial instruments being negative risk return of co-relation like Bonds and shares are taken in a single port folio to reduce the risk. A physical risk of non availability of a particular material is often solved by having more than one supplier.

(v) **Transfer Risk :** Normally in projects assignments or multifaceted exercises, execution is fought with risks. Different agencies work together and these agencies take care to transfer risk in their areas to another agency which is better equipped to take care of a risk for a consideration. The concept of core competence curves in here. Whenever a particular agency, individual or a firm that is dealing in a area where it does not have core competence to deal with, it seeks the help of another agency which has the specific core competence to transfer its own risk. The risk may be in the form of loss of reputation or sub quality performance and this risk is taken care of through transfer.

(vi) **Share Risk :** Insurance is a method of sharing risk for a consideration, i.e . premium insurance loss, undertakes to share the risks with companies and share their own risks through re-insurance with other companies. Some times big conglomerates share risk among their own group of companies in proportion to their risk bearing strengths by creating a corpus instead of paying premium to insurance companies.

(vii) **Hedge Risk :** Exposures of funds to fluctuations in foreign exchange rates, interest rates, prices, etc. bring about financial risks resulting in losses or gains. The downside risk is often taken care of by hedging. Hedging is done by an agency taking over the risk for a consideration for a period and select band of fluctuation.

Answer 19. (b)

Risk Reporting is an important step in Risk Management because :

- A transparent and effective risk reporting system is essential for a company, as it is obligatory on its part to disclose all material risks that it faces and its risk management practices. In recent years, the concept of risk reporting has assumed significant importance, after the collapse of Enron as well as other corporate failures. Existence of an adequate Risk Reporting System in an organisation makes the managers more accountable for their actions. In the light of this, the importance of risk reporting system can be summarised as under:
- It can assist the Board to discharge its responsibilities, enabling the company to go for higher profits at lower risks.
- It helps in decision-making at all levels with objectivity.
- It can help investors to evaluate market situations with a view to building optimum portfolio of securities.
- Lenders can be supported in their lending operations and policy decisions.
- It can help a company in getting a better credit rating and access to cheaper source of finance.
- It develops transparency between managers and investors-leading to reduced agency cost, which in turn reduces the cost of capital and increases the basket of investment opportunities available to a firm.
- It can create a niche for the company and can act as a trendsetter for others.

Q. 20. Explain the concept of 'Risk Pooling' and Diversification of Risk.

Answer 20.

Concept of Risk Pooling : The concept of pooling risk is the process of identification of separate risks and put them all together in a single basket, so that the monitoring, combining, integrating or diversifying risk can be implemented.

Monitoring becomes easier when the specific agency put in charge knows that all the risks have been identified and they are being monitored according to the system drawn up to quantify the total risk through pooling and with a control figure i.e., plan the way to monitor, actually monitor and then check whether there are variations from the monitoring exercise and then act to correct the deviation. This correction act can be combining risks or integrating risks or diversifying risks.

For example, whenever a project is put up, Transit Insurance is taken for transporting the various plant and machinery from the manufacturers to the project site. The materials are then received at the site and stored until erection. Storage Insurance will cover the risk during the storage. During erection of different plant & machinery, risks due to mechanical, electrical etc., are covered through Erection Insurance. The erected plant & machinery is then tested and trial runs are taken for guarantee purposes on continuous run, as per the contract. The risk covered during this period is covered as risks for commercial run. All these risks put together is called pooling. This single pooled policy has a risk value and premium payable and the conditions attached thereto by both the insurer and the insured to carry out those obligations are clearly spelled out in the policy documents.

Diversification of risk : This involves identifying both the systematic and the unsystematic risks. Systematic risk is inherent and is peculiar to the type of the business/firm and can be reduced or diversified through functional level strategy. The unsystematic risk is external to the organisation and is termed as 'market risk'. The identification of characteristics of market risk through statistical correlation 'Beta', which is a measure of market risk, lends itself for manipulation through portfolio management.

Q. 21. (a) Define Business Risks.

(b) How do you measure Physical Risk?

Answer 21. (a)

Business Risk refers to variations in earnings due to demand variability, price variability, and variability for input prices etc., which are essentially external and are market driven. Business risk which is inherent to a business due to its nature and susceptibility to environment e. g., changes of fashion, business cycles, conflicts like war, insurgency, cross-border terrorism, technological obsolescence etc.,

Business risks can be divided into internal and external business risks. Internal business risk is mainly due to the variations in the operational efficiency of the company. The External business risks arise out of the circumstances imposed on the company by external forces like business cycle, certain statutory restrictions or sops.

Answer 21. (b)

Physical risks (like natural calamities, fire, tsunami, earthquake etc.) can be measured by the application of technological tools. Earthquakes are measured in the Richter scale. Floods are measured through level monitoring and marking danger levels. Risk of fire is often monitored through measurement of Flash Point, Fire Point, Ignition temperatures and Propulsion temperatures. Spontaneous ignition temperatures are yet another measurement to identify fire risk, e. g., coal dumps, oil installations, explosive go downs, etc.,

Physical Risk arising out of social, political, economic and legal environments are often identified through the performance of lead indicators. In social arena, lead indicators can be pestilence, expediencies, social upheavals etc., Measurement of these social risks are done on the basis of the impact on the society, i.e., increase in crimes, violence and accidents etc.,

Political risk is often identified with the change in Government Policy approach like say-Capitalistic, Democratic or Totalitarian and can be measured by the impact of such Government policy on the economic activity e. g., Government's Industrial Policy or Labour Policy. Economic Risk may arise out of commercial transactions, foreign exchange currency variation, capital market fluctuations, trade cycles etc., The lead indicators risks are like variations in GDF, IIP, Balance of Payments, Stock Market Indices, etc.

Legal Risk arises out of the implications of various statutes affecting business like say-Anti Trust Bills, Factory Act, Industrial Disputes Act, Foreign Exchange Management Act (FEMA) etc.

Q. 22. What do you understand by systematic and unsystematic risks? How do you further classify systematic and unsystematic risks?

Answer 22.

The risk is understood as the sacrifice made by an individual by deferring the use of money to a future day by investing that money in a venture promising a higher return which has uncertainty. The forces that contribute to the variations in return can both be external or internal to a company in which an individual has invested. These forces can partly be controllable and the remaining uncontrollable. The uncontrollable portion, which is essentially external, is known as systematic risk and the controllable internal risk is known as unsystematic risk.

The external or systematic risk can be classified as three types of risk :

Market Risk : Variability in return on investments in the market is referred to as market risk. This is caused by investor reaction to the tangible as well as intangible events. Tangible events like economic, political, social events and intangible events arising out of a market psychology or the other factors like interest rates and inflation also form part of the forces behind market risk.

Interest Rate Risk : This risk refers to the uncertainty of market volumes in the future and the quantum of future income caused by the variations in the interest rates. These interest rates are normally controlled by the Reserve Bank of India in our country and the exigencies for changing the interest rates arise out of many economic factors which are monitored by the central bank i.e., R.B.I. Normally, when the interest rates increase the companies with higher quantum of borrowed money will have to pay out higher quantum of interest reducing their earnings and vice versa.

Purchasing Power Risk : Purchasing power risk is the uncertainty of the purchasing power of the monies to be received, in the future. In short purchasing power risks refers to the impact of inflation or deflation on an investment. Prudent investors normally include a premium for purchasing power risk in their estimate of expected return.

Exchange Risk : With the globalisation of market cross border transactions are on the increase. Balance of payments comprising the net effect of exports and imports are subject to fluctuation in the various currencies. As recently, the strengthening of Rupee against the Dollar imports has made imports cheaper and exports costlier. The need to recognise this exchange risk is obvious as the international trade operations may be profitable or loss-making unless this risk is taken care of.

Unsystematic Risk : Unsystematic Risk is that fraction of total risk which is unique to a company or an Industry due to inherent internal factors like managerial capabilities, consumer responsiveness, labour unrest, etc. The operating environment of the business and the financing modalities involve this unsystematic risk. The first one is known as the Business Risk and the second is the Financial Risk.

Business risks can be again divided into internal and external business risks. Internal business risk is mainly due to the variations in the operational efficiency of the company. The external business risks arise out of circumstances imposed on the company by external forces like business cycle, certain statutory restrictions or sops.

Financial risk is associated with the modalities adopted by a company to finance its activities. For instance the financial leverage like the Debt Equity Ratio or the type of borrowings and the variations thereof introduce financial risk. Lower the debt less is the financial risk.

Q. 23. Explain the role of a Management Accountant in insurance risk management.

Answer 23.

In the wake of economic uncertainties through which the business passes, a management accountant has to stay close to risk management process in an organisation and bring about a structured thinking within the business about risks. Irrespective of his role, as a management accountant in an insurance company or an insured company, a management accountant has to appreciate the computation of the premium rates for different insurance product, as also fully define the character of the losses to be covered.

Value imputation of risks to be covered by the insurer's company has two aspects :

(i) Quantifying the total risk to be covered for calculating a premium as a definite fraction of the risk value covered by the policy.

(ii) If the quantification of risk is so high and the corresponding premium is also likely to be high enough for an insured to back out, then develop a framework where the insurer's company can reinsure itself for the policy risk with another insurance company. This will help in reducing the premium for the insured.

A management accountant in an insured company has his task cut out in two directions. At the time of covering the risk, he has to work closely with the cross functional team to identify the direct values of the risks involved and indirect consequent values of the risks involved. For example, in the first instance, the replacement cost of a plant being insured is a direct cost and has to be quantified by proper methodology. The next step is to estimate the consequential loss of profits due to stoppage of plant due to breakdown of the plant being replaced.

During the period of economic uncertainties, the management accountant can fortify the management thinking process -through providing a robust, highly reliable, fast and responsive, transparent and reliable Information Management, which will continuously highlight the risks inherent in every management activity.

Q. 24. (a) What are the characteristics of Insurance Exposures?

(b) Write short notes on :

(i) Re-insurance.

(ii) Utility Theory.

Answer 24. (a)

The characteristics for an exposure to be covered by Insurance are as follows :

I. Pure Risk :

These are classified into personal risk, property risk, liability risk and loss of income risk.

- Personal Risk – Can happen due to premature death, old age, sickness or disability and unemployment.
- Property Risk – Can be classified as loss of property, loss of use of property, additional expenses arising out of loss of property.
- Liability Risk – Can arise as injury to people or damage to property or negligence or carelessness.
- Loss of Income Risk – Consequential loss of income arising out of personal or property losses.

II. Similar Exposures :

Predictions of losses through application of statistical computations with the help of theory of probability require a sizeable population of similar exposures. This is particularly important in that estimation of probabilities for the happening of an event needs an adequate large sample, as accuracy increases with bigger sample.

III. Accidental Losses :

Insurance contracts allow payments only for accidental losses which are beyond the insured's control. Losses taking place unintentionally alone are covered by Insurance. Suppression of information of a known risk will not entitle for compensation.

IV. Definite Loss :

A definite loss has three facets. It should be recognizable and should be susceptible to verification. The loss should be measurable. This is particularly important in that premium are computed mainly on the estimated quantification of losses.

V. Large Loss :

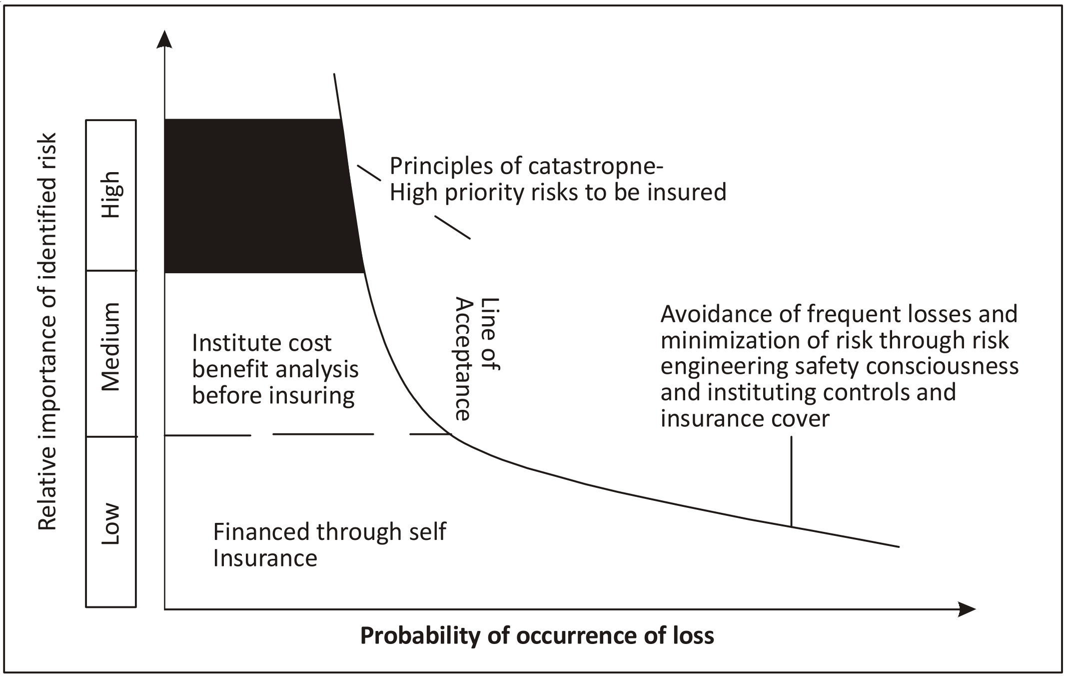
As there is always a consideration in the form of a premium for receiving a compensation for a loss, care should be taken that the premium to loss ratio is sufficiently favourable. Insurance tariffs normally form a very small percentage sometime even less than a per cent.

VI. Catastrophic Losses :

Catastrophic losses from natural disasters have two main characteristics:

(i) They are limited to geographic area where the impact has taken place.

(ii) Prediction of the event is very difficult. For example storms and floods or earthquakes etc. can create catastrophic losses as such an Insurer will have to take special precautions of calculating the premiums. Even then the loss may be so huge that the consumers normally resort to sharing the risks through reinsurance as also ensures dispersion of risks over a larger geographical area. To estimate the frequency and severity of the catastrophic losses probability analysis is resorted to :



Answer 24. (b)

(i) All insurance companies have a risk appetite i.e. a limit on the amounts that they can settle for any given claim that is made by the Insured. Any claims made beyond this specified limit by the insured is settled by another company referred to as a Reinsurance company.

Thus, Reinsurance is insurance for insurance companies. Reinsurance is the transfer of part of the risk that a direct insurer assumes by way of an insurance contract on behalf of the insured, to a second insurance carrier, the Re-insurer who has no direct contractual relationship with the insured. Direct insurers need reinsurance to limit annual fluctuations in the losses they must bear on their accounts and to protect the assets of the company in the event of a catastrophe. Direct insurers take on hazards and risks from the policy holders. Re-insurers take on hazards and risks from the direct insurer.

Insurance companies typically enter into an agreement with the Re-insurer and sign a Reinsurance Treaty which states all the terms and conditions of the agreement. The Re-insurer agrees to accept a certain fixed share of risk upon terms as set in the agreement. The well known Reinsurance companies in the world are Swiss Re, Munich Re, and Zurich Re. For example, an Insurance company has a risk appetite of Rs.1 million. But has issued a general insurance policy for an engineering project where the sum insured is Rs.4 million. If a claim is made on this particular policy, the claim will be settled for Rs.4 million. Rs. 1 million will be paid by the Insurance Company that issued the policy and the remaining 3 million will be paid by the Reinsurer.

(ii) The destruction caused by any unforeseen event is referred to as "Risk". In the insurance business, people exposed to the same risk form a group and share the loss together. Insurance companies collect the shares (Premiums) in advance from the group and create a fund. This fund is utilised to pay for the loss (Claims) that is incurred by any member of the group.

Risks can be classified into various types :

(A) Financial and non-financial risks

(B) Dynamic risks

(C) Speculative risks

Risk cannot be avoided through insurance but may be considered as a means to transfer the risk. It is also a mechanism to compensate the financial and economic loss due to risk. Safety measures and damage control management can be adopted to mitigate or eliminate the magnitude of risk. The fundamental principle of insurance is to share the losses and to substitute uncertainty with certainty. Expected utility theory emphasizes that the demand for insurance is a demand for certainty. The conventional specification of the theory perceives that the buyers of insurance prefer certain losses to actuarially equivalent uncertain losses. But certain other surveys indicate that individuals actually prefer uncertain losses to actuarially equivalent certain losses. This can be explained by saying that "the purpose of any insurance policy is to convert an uncertain, but potentially large loss into a certain small loss. Such a conversion benefits the consumer, if greater losses cause progressively larger declines in utility (i.e., if there is diminishing marginal utility of wealth)". For example, insurance against fire peril where the bigger part of the loss will be insured that is uncertain for a specific premium today.

Another approach evaluates a conventional expected utility theory explaining the demand for insurance by an individuals demand for an uncertain payoff of income in a pre specified state. This can be explained through the demand for health insurance. According to this theory, becoming ill fundamentally changes preferences. Thus an insured customer is able to transfer income into the ill state where the marginal utility of income is greater.

Q. 25. (a) Discuss 'pricing' in relation to an insurance product.

(b) State briefly your understanding about RAPM.

Answer 25. (a)

The process of determining or fixing the rates of premium for a particular product is known as pricing. Traditionally, premiums have been calculated based on tariffs set by the Insurance Regulatory Authority. The rates are derived based on various factors like past loss ratio, location of the asset, type of asset, as well as exposure to the risks. Rate is the pricing factor upon which the premium is based. For example, car insurance policies are priced based on factors such as make and model of the car, purpose for which the car is used, etc.

Traditionally, for motor insurance, the parameters that are used to price a policy have been model of the car, age of the driver, location of the car and purpose for which the car is driven, etc. The industry will eventually move from price rating to risk rating. The pricing for each individual will be based on their track record. For example, for 'own damage' in a car insurance policy, the pricing parameters will be the model of the car, driver's age and engine capacity. This is of particular importance to a management accountant as it is in the nature of pricing a product.

The insurance premium can be broken up into four parts :

- Cost of payment for losses
- Cost of operation and maintenance of insurance pool
- Reserve for contingencies
- Return on Investment.

In the life insurance, calculation of insurance premium is very complicated exercise as the variables involve are many, e.g., factors aggravating mortality rates, like smoking, drinking, drugs and other habits, age of the insured, occupational hazard, etc. This computation is normally through actuarial computations involving mortality rates. Premium rate is often referred as rate per unit of exposure.

Answer 25. (b)

RAPM : stands for Risk Adjusted Performance Management.

The best practice recommendation was enunciated in the G30 report on derivatives. The recommendations have been considered very sound and very much in use currently. They include:

(i) Involve senior management;

(ii) Establish independent risk managers for market and credit risk.

(iii) Market to Market on a daily basis with consistent valuation measures.

(iv) Measure and limit market and credit risk, using value at risk (VAR) techniques to estimate probable loss over a period of time.

(v) Strengthen operational controls, systems and training,

(vi) Make investment and funding forecasts,

(vii) Identify revenue sources and next conduct stress testing.

Q. 26. Describe 'Asset-Liability Model' and its utility for managing liquidity risk and exchange rate risk.

Answer 26.

Asset-liability Management Model : Asset-liability Management Model involves matching of the assets and the liabilities, by which a prudent management of an investment portfolio can be properly taken care of. Asset-liability management is defined as "maximising the risk adjusted returns to shareholders over the long run". It is also defined as management of total balance sheet in terms of size and quality (composition of assets and liabilities).

Liquidity risk management through Asset-Liability Management : It is difficult to measure liquidity risk as it entails expected likely inflow of deposits, loan dispersals, changes in competitive environment, etc. , The most commonly used techniques for measurement of liquidity risks is the gap analysis.

The Assets and Liabilities are arranged according to their maturity pattern in time brackets. The gap is the difference between the maturing assets to the maturing liabilities. A positive gap indicates that maturities of assets are higher than those of liabilities. A negative gap indicates that some rearrangement of funds will have to be done during that time bracket. It can be from sale of assets or issue of new liabilities or rolling over existing liabilities.

Exchange Rate Risk Management through Asset-Liability Management : At a particular exchange rate, assets and liabilities of a financial institution match exactly. As the exchange rate fluctuates, this balance-gets disturbed. A simple solution to correct this risk is to match assets and liabilities of the same currency. Many financial institutions do not have foreign exchange exposure, as all their assets and liabilities are in rupee currency. The risk of foreign exchange borrowings of these institutions is passed on to the lenders through dollar denominator loans. The uncovered loans are hedged at the time of contacting them through forward covers for the entire amount.

Q. 27. Describe the following in the context of risk management :

(i) Solvency related measures,

(ii) Performance related measures.

Answer 27.

(i) Solvency related measures in the context of risk management :

These measures concentrate on the adverse 'trail' of the probability distribution and are relevant for economic capital requirements.

- *Probability of ruin* : the percentile of the probability distribution corresponding to the point, at which the capital is exhausted.
- S*hortfall risk* : the probability that a random variable falls below some specific threshold level (Probability of ruin is a special case of shortfall risk, in which the threshold level is the point at which capital is exhausted)
- *Value at Risk (VAR)* : the maximum loss an organisation can suffer, under normal market conditions, over a given period of time at a given probability level. VAR is a common measure of risk in the banking sector, where it is typically calculated daily and used to monitor trading activity.
- Expected Policy holder Deficit (EPD) or Economic Cost of Ruin (ECOR) -is an enhancement to the probability of ruin concept(and thus shortfall risk at VAR) in which the severity of the ruin is also affected. Technically, it is the expected value of shortfall.
- Tail Value at Risk (Tail VAR) or Tail Conditional Expectation (TCE) -an ECOR-like measure in the sense that both the probability and the cost of 'tail events' are considered.
- Tail events-unlikely but extreme events, usually from a skewed distribution. Rare outcomes, usually representing large monetary losses.

(ii) Performance related measures in the context of risk management :

These measures concentrate on the mid-region of the probability distribution, i.e., the region near the mean and are relevant for determination of the volatility around expected results :

- Return on Equity (ROE) i.e., net income divided by net equity.
- Operating earnings- i.e., net income from continuing operations, excluding realised investment
- Earnings before interests, dividends, taxes, depreciation and amortisation (EBITDA) a form of cash flow measure, useful for evaluating the operating performance of companies with high levels of debt(when the debt service costs may overwhelm other measures such as net income)
- Cash flow return on investments (CFROI) = EBITDA divided by tangible assets.

Q. 28. Enterprise risks involved in solvency transactions as well as ageing debts have to be taken care of on a day-to-day basis in the business. What are the instruments used for this purpose and application there of?

Answer 28.

Major tools (instruments) for managing enterprise risk are as below :

Instrument	Purpose	Remarks
Guarantee	Guarantees can be financial guarantees or performance guarantees. • Financial guarantees protects against the financial loss on failure to meet financial obligations. • Performance guarantees are protection against non-performance of contractual obligations.	Financial Institutes provide Guarantees as a risk-cover against a collateral by the buyer for a consideration.
Letter of Credit or Documentary Credit.	Guarantee against non-payment of purchase consideration by the buyer in the nature of off-balance sheet financing.	Financial Institutions issue this instrument for a consideration. It can be recoverable or irrevocable. It can also be revolving.
Under-writing	Under-writing is a protection mechanism available in the capital market to cover the risk of non-subscription to a public issue.	Financial Institutions offer this risk cover for a consideration after due evaluation of risk.
Collateralized Debt obligations	Taken against short-term and long-term loans for working capital as well as fixed assets.	Financial Institutions offer this risk cover for a consideration after due evaluation of risk and cover themselves completely either through hypothecation or pledges or equitable markets.
Asset Securitisation	Companies offering financial services of hire-purchasing, leasing etc., try to raise finance through this method.	This is a special purpose vehicle (SPV) to manage default risk. Financial institutions as well as public subscribe to this method for a consideration in the form of interest and securitization is available from the assets that are being traded.
Factoring	Companies resort to this instrument both as a risk cover and insure cash flow.	Specific financial institutions called factoring companies offer this service for a commission with recourse or without the recourse.

Q. 29. (a) What are the strategies adopted for Corporate Risk Management?

(b) How do you embrace project risk management and what are the strategies to be adopted?

Answer 29. (a)

In risk management, the following strategies are generally adopted :

- **Risk Avoidance** is a strategy by which the organisation does not engage in the activity which involves any risk.
- **Risk Reduction** is another strategy where the organisation takes two steps. One is preventing the occurrence of risk and the second one is controlling the number of occurrences. One of the possible ways of reducing the risk is going for large number.
- **Risk Retention** is the most popular method of dealing with risk. Risk retention may be conscious or unconscious. Conscious risk retention takes place when the risk is perceived and not transferred or reduced. When a risk is not recognised, it is unconsciously retained.
- **Risk Transfer** is another method of managing risk. Risk can be transferred to a person willing to take it. Hedging or insurance are best examples for risk transfer
- **Risk Sharing** is process by which the potential risk is shared among many, so that the loss is not borne by a single person.

Answer 29. (b)

Project risk can be embraced through comprehension of residual risk. This risk could be retained by developing a proper information system regarding the residual risks, commercial aspects and developing a clear sense in bearing various risks, then understanding of particular risk domains to develop ability to bear commercial risks. This risk could be transferred through developed information system regarding financial institutions, capital markets and special vehicle applications identification local industrialists who are ready to partner for sharing risks through a portfolio of investment, identification of international partners for sharing investments through a portfolio of investment, identification of financial institutions locally like commercial banks, identification of international financial institutions.

Q. 30. (a) "To be effective, any Enterprise Risk Management (ERM) implementations should be integrated with strategy-setting". In this context discuss the elements of ERM and the reasons behind its implementation.

(b) How do you shape institutions for project risk management and what are the strategies to be adopted?

Answer 30. (a)

"To be effective, any Enterprise Risk Management (ERM) implementation should be integrated with strategy-setting". In today's challenging business environment, opportunities and risks are constantly changing, giving rise to the need for identifying, assessing, managing and monitoring the organisation's business opportunities and risks.

This, in turn, necessitates establishing the linkage between the opportunities and risks while managing the business. This requirement is addressed by ERM, which redefines the value proposition of risk management by elevating its focus from the 'tactical' to 'the strategic ERM is about designing and implementing capabilities for managing the risks that matter. In the light of this, the statement is correct and therefore acceptable.

Basic Elements of ERM :

The following are the basic elements of ERM :

- A process, ongoing and flowing through an entity.
- Effected by people at every level of an organisation.
- Applied in strategy setting.
- Applied across the enterprise, at every level and unit and includes taking an entry-level view of risk.
- Designed to identify potential events affecting the entity and manage risk within its risk appetite.
- Able to provide reasonable assurance to an entity's management.
- Geared to the achievement of objectives in one or more separate but overlapping categories. It is 'a means to an end, not an end in itself'.

Reasons why ERM is implemented :

ERM needs to be implemented for the following reasons :

- Reduce unacceptable performance variability.
- Align and integrate varying views of risk management.
- Build confidence, of investment community and stakeholders.
- Enhance corporate governance.
- Successfully respond to changing business environment.
- Align strategy and corporate culture.

Answer 30. (b)

Institutions can be shaped by anchoring projects, ensuring repayment of investments, providing social utility. This risk could be avoided by stabilisation of long term future to enable investments, enhance the legitimacy of the project by developing practices like inviting the representatives of both the institutions and the public. Develop a strong framework for structuring decision making.

FINAL EXAMINATION

(REVISED SYLLABUS - 2008)

GROUP - III

Paper-14 : INDIRECT & DIRECT – TAX MANAGEMENT

Q.1. (a) Fill in the blanks :

(i) Audit of SSI units is conducted once in _________ years.

(ii) _________ is called as general bond with surety/ security for removal of goods without payment of duty.

(iii) MRP provisions are not applicable for packaged commodities meant for _________ .

(iv) Service tax came into force from _________ Finance Act.

(v) Services provided by Central or State Government are taxable unless these services are _________ .

(vi) Service tax liability is exempted if te turnover is less than or equal to _________ .

(vii) Kerosene sold through public distribution system will attract VAT rate _________ .

(viii) Duty drawback on re-export is allowable if goods are re-exported within _________ years.

(ix) Where security has been furnished to the central sales tax authority in the form of a surety bond, death of surety should be intimated within _________ days of such occurrence and fresh surety bond furnished within _________ days.

(x) Composition scheme will be applicable on the dealer having annual turnover less than _________ In the preceding financial year.

Q.1. (b) State with reasons, whether True or False :

(i) Brand name owner is a manufacturer even though under contract a third party completely manufactures the product.

(ii) Insurance charges from the place of depot to the place of buyer shall form part of assessable value.

(iii) Sales Tax is leviable on sale of stocks, shares and securities traded by a dealer in shares.

(iv) A person who manufactures gold ornaments with the gold supplied by the customer is not a dealer under CST Act.

(v) Valuation audit can be ordered by the Superintendent of Central Excise.

(vi) Additional duty of customs u/s 3(5) of the Customs Act is payable only on import of industrial products and not on import of agricultural product.

(vii) Hides and skins are 'declared goods'.

(viii) In case of transactions of taxable service with an associate enterprises, service tax is required to be paid not on receipt basis, but on receipt or date of credit/debit entries in the books of account, whichever is earlier.

(ix) Provisional assessment can be initiated by Excise Department.

(x) Exemption from Excise duty does not mean exemption from registration.

Answer 1. (a)

(i) Two to Five

(ii) B-1 bond

(iii) Industrial or institutional consumers.

(iv) 1994

(v) Statutory services.

(vi) Rs. 10,00,000

(vii) 4%

(viii) Two years

(ix) 30, 90.

(x) Rs. 50 lakhs.

Answer 1. (b)

(i) **False** — Brand name owner is **not** a manufacturer even though under contract a third party completely manufactures the product.

(ii) **False** — Insurance charges from the place of depot to the place of buyer shall **not** form part of assessable value.

(iii) **False** — As per definition of goods under CST, the term does not include stocks, shares and securities**.**

(iv) **True** — Where the assessee is an ornament maker with the gold supplied by the customer, he is not a dealer but only a contractor for work and labour.

(v) **False** — Valuation audit can be ordered by the Asst. or Deputy Commissioner of Central Excise after getting the prior permission of Chief Commissioner of Central Excise.

(vi) **False** — The 4% special CVD, u/s 3(5) of the Customs Tariff Act, 1975 was imposed last year only on ITA goods and their parts/components. This has been extended to all imports vide customs notification no. 19/2006 – Cus dated 1.2.2006. It will apply to both agricultural and industrial products.

(vii) **True** — These are declared goods u/s 14.

(viii) **True** — Service tax is required to be paid on transaction with associated enterprises either on receipt of payment or making credit/debit entries in the books of accounts, whichever is earlier.

(ix) **False** — Assessee has to request for provisional assessment.

(x) **True** — These two are independent of each other. Registration and compliance of following excise procedures is necessary even of a product is exempt from duty, unless exemption from registration been granted under rule 9(2).

Q. 2. (a) Distinguish between tax avoidance and tax evasion.

(b) State the main ingredients which make tax planning a legitimate exercise.

(c) A registered dealer was eligible to purchase certain goods at concessional rate of CST. However, through oversight, the goods were not included in his registration certificate. He issued C form for purchase of the goods. State the consequences.

Answer 2. (a)

The broad areas of distinctions are :

Tax avoidance :

(i) Any planning of tax which though done strictly according to legal requirement but defeats the basic intention of the Legislature behind the statute, could be termed as an instance of tax avoidance.

(ii) Tax avoidance takes into account the loopholes of law.

(iii) Tax avoidance is tax hedging.

(iv) Tax avoidance is legitimate but an element of malafide motive is involved.

(v) Tax avoidance is intentional tax planning before actual tax liability arises.

Tax evasion :

(i) All methods by which tax liability is illegally avoided is termed as tax evasion.

(ii) Tax evasion is an attempt to evade tax liability with help of unfair means/ methods.

(iii) Tax evasion is tax omission.

(iv) Tax evasion is unlawful and an assessee guilty of tax evasion may be punished under the relevant laws.

(v) Tax evasion is intentional attempt to avoid payment of tax after the liability to tax has arisen.

Answer 2. (b)

Tax planning is a perfectly legitimate exercise if it complies with under-mentioned ingredients :

(i) Tax planning should not violate the basic intention of Legislature behind the statute.

(ii) Tax incentives availed of by the assessee is within the ambit of legitimate tax planning.

(iii) Planning of financial affairs by a series of transactions (doctrine of form) each having individual legitimacy and composite effect produced as a whole (doctrine of substance) following the true spirit of law, is perfectly legitimate.

(iv) Tax planning should not involve use of colourable devices for reducing tax liability.

Answer 2. (c)

Mere eligibility to purchase goods at concessional rate is not sufficient. The goods must be mentioned in the registration certificate. As per section 10 (c) of CST Act, false representation when purchasing any goods that the class of goods are covered by the registration certificate, is an offence. As per section 10 (a), furnishing a false certificate is an offence. If certificate of registration of dealer does not cover item of goods purchased in inter state sale, benefit of exemption under section 6 (2) of CST Act is not available – *State of TAmilnadu v. Trade International (1999) 113 STC 70 (Mad HC DB).* Knowingly purchasing goods which are not covered in registration certificate under 'C' form is an offence – *Business Consultancy v. State of TAmilnadu – (1994) 94 STC 176 (Mad HC DB).* Penalty is imposable if 'C' form is issued in respect of goods not included in registration certificate - *State of TAmilnadu v. Shyal Chemicals (1998) 108 STC 396 (Mad HC DB).*

Thus, dealer will have to pay differential sales tax, plus penalty can be imposed.

Q. 3. (a) Explain distinguishing features between provisions of 'pilferage' and 'loss or destruction of goods' under Customs Act.

(b) Briefly discuss the validity of the following statements :

(i) 2,000 units of raw material were purchased on which duty paid was Rs. 32,000. 20 units were damaged during the course of unloading, rendering them unfit for consumption or sale. Cenvat credit can be claimed in respect of all the units.

(ii) Lump sum payment and annual royalty for transfer of technical know-how for manufacturing goods in includible in the assessable value.

(c) Prestige Internationals Ltd. manufacture coffee makers. From their plant at Bangalore the products are moved to various depot. The company packs them in plain white carton from the factory, for protecting the goods during transportation. At the depots, the plain cartons are discarded and put inside a printed carton before effecting sales. The company includes the value of printed carton in the assessable value, but not the cost of plain white cartons. Is the same correct under the Central Excise Act, 1944 ?

Answer 3. (a)

Difference in sections 13 and 23 (1) can be summarized as follows :

Section 13 - Pilferage	Section 23 – Loss or destruction of goods
Pilferage means loss arising out of theft	Such loss may arise by fire, natural calamity etc.
Section 13 deals with pilferage	Section 23 (1) deals with loss or destruction of goods, except pilferage.
No duty is payable at all under section 13, but liability revives for duty if goods are restored.	Duty is payable under section 23 (1), but it may be remitted by Asst. Comm. Of Customs. Thus, unless remitted, duty has to be paid under section 23 (1)
Importer does not have to prove pilferage.	Burden of proof is on importer to prove loss or destruction.
Pilferage should be before order for clearance is made.	Loss or destruction can be at any time before clearance.
Loss must be only due to pilferage.	Loss or destruction may be due to fire, accident etc., but not pilferage e.g., loss by leakage is covered under section 23.
Under section 13, normally duty is not paid. However, if duty is paid before examination of goods, refund can be claimed if goods are found to be pilfered during examination but before order for clearance is made.	Under section 23 (1), if duty is paid, then refund can be obtained only if remission is granted by Customs Authorities. Thus, remission under section 23 (1) is at the discretion of Customs Authorities. [Of course, the discretion has to be exercised judiciously].
Section 13 is not applicable for warehoused goods.	Section 23 (1) is applicable for warehoused goods also [As goods transferred to warehouse are not 'cleared for home consumption'].

Answer 3. (b)

(i) The statement is incorrect. 20 units out of the intended inputs were destroyed prior to their issue to production and hence cannot be construed as "used in or in relation to manufacture". Cenvat credit cannot be claimed in respect of these 20 units. For the rest of the units, i.e. 1,980 units Cenvat credit can be claimed.

(ii) The statement is not correct. Lump sum payment and annual royalty for transfer of technical know-how - As per rule 9 of the Customs Valuation Rules. 1989, the transaction value is inflated by cost c services and expenses as specified. Under rule 9(1)(c) royalties and licence fee related t the imported goods that the buyer is required to pay as a condition of sale of goods being valued, is added to the transaction price. It is to be noted that only such amount c royalties and licence fee which relate to the imported goods is to be added back. In this case the lump sum payment and annual royalty are related to the manufacture of good and do not relate to the imported goods. Hence, this amount is not includible in this assessable value.

Answer 3. (c)

As per section 4(4)(d)(i) of the Central Excise Act, 1944, in relation to excisable goods, 'Value' includes, where the goods are delivered at the time of removal in packed condition, the cost of such packing, excepting the cost of packing which is durable in nature and is returnable to the assessee by the buyer. The explanation to the clause enjoins that 'packing' means the wrapper, container, bobbin, pin, spool, reel or wrap beam or any other thing in which the excisable goods are wrapped, contained or wound.

In the problem, the plain carton packing is only to protect the goods during transportation from the factory to the depots; the intention is to avoid damage to the printed cartons if used in the first stage of transportation itself. At the depots, the plain cartons are discarded and the coffee maker is put inside a printed carton before effecting sales. The cost of printed cartons has been correctly included by the assessee in the assessable value of the goods, the cost of plain white cartons is not includible. Reliance can be placed on the discussion in the case of Eureka Forbes Ltd. vs. CCE 1999 (114) ELT 140.

Q. 4. (a) What are the essential requirements of 'penultimate sale for export' under Central Sales Tax Law?

(b) Whether CENVAT credit will be allowed in respect of the duty paid on inputs or input service used in the manufacture of intermediate products by a job worker?

(c) The registered offices of the assessee and one of the bulk buyers of the assessee were located in the same premises. Further, the factory of the assessee was located in the industrial area owned by the bulk buyer of the assessee, forf which the assessee used to pay a suitable rent. The assessee gave 40% discount to the said bulk buyer. The Department questioned this discount on the ground that the two parties were related persons.

Answer 4. (a)

Export often effected through specialized agencies like Export Houses etc., termed as 'Merchant Exporters' under EXIM policy. Such indirect exports also m=need exemption from taxes to make the products competitive. Hence, such penultimate sale, i.e., sale preceding the sale occasioning export is also deemed to be in the course of export u/s 5 (3) of CST Act and is exempt from CST.

Exemption to penultimate sale is subject to the condition that the penultimate sale (i.e. last but one sale) is (a) for purpose of complying with agreement or order in relation to export and (b) such sale is made after the agreement or order in relation to export and (c) same goods which are sold in penultimate sale should be exported. In other words, the final exporter should be in possession of export order from foreign buyer and should take delivery of goods from the supplier making penultimate sale solely for execution of such export order and export the same goods.

In Consolidate Coffee Ltd. v. Coffee Board – AIR 1980 SC 1468, it was held that all the aforesaid conditions must be satisfied for availing exemption u/s 5 (3) of CST Act. It was also held that 'agreement or order in relation to export' means or refers to the agreement with a foreign buyer and not an agreement or order with a local party containing the covenant to export.

Only penultimate sale is exempt but purchases earlier to penultimate sale are not exempt and purchase tax is payable if prescribed.

There must be a pre-existing agreement or order to sell the specified goods to a foreign buyer, last purchase must be after the agreement with foreign buyer and the last purchase must be made for complying with the pre-existing order. Only then the transaction is covered under section 5 (3), i.e., it is treated as a 'penultimate sale'. The same goods, which are purchased must be sold. Thus, when fresh frog legs were purchased and these were exported after removing skin, cleaning and freezing, it was held that 'same goods' were sold and purchases of frog was eligible u/s 5 (3).

Answer 4. (b)

Rule 3(1) provides that CENVAT credit will be allowed of the duties, tax or cess paid on inputs/ input service used in the manufacture of intermediate products by a job worker if –

(i) The job worker is availing the exemption given under Notification No. 214⁄86 – CE, and

(ii) The said intermediate products are received by the manufactures of final products for use in or in relation to the manufacture of final products.

Answer 4. (c)

The buyer and seller will be related persons only when there is a holding and subsidiary company concept is exist or persist as per Rule 10 of the Central Excise Valuation 9DPEG) Rules 2000or there should be legal relationship between the individuals (like husband and wife or brother and sisters). In the given case there is no mutuality of interest between the two parties (like sharing of profits, flow of funds etc.). therefore, discount @ 40% is called uniform discount which is allowed to deduct from the total value for the purpose of finding the Assessable Value [CCEx v. Damnet Chemicals Pvt. Ltd. 2007 (216) ELT 3 (SC)].

Q. 5. (a) One of the plants of the tax-payer produces ferrous sulphate, chromium sulphate and sulphur-di-oxide during the prepration of khaki dye. These are intermediate goods/semifinished goods and are not marketable. Central excise authorities demand excise duty on the ground that the tax-payer was manufacturing these goods and clearing them for internal consumption. Your advice as a consultant is sought by the tax-payer.

(b) Explain the mode of valuation when goods are sold partly to related persons and partly to independent buyers?

(c) M/s. Super Infotech imported a consignment of computer software and manuals valued at Rs. 50 lakhs and contended that the actual value was only Rs. 15 lakhs while the balance amount represented license fee for using the software at multiple locations and as such customs duty is payable only on the actual value of Rs. 15 lakhs. Is the contention, raised by M/s. Super Infotech, correct? Discuss.

Answer 5. (a)

In CCE vs. Ambalal Sarabhai Enterprises (1989) 43 ELT 214(SC), the Supreme Court declared that intermediate product will not be dutiable if it cannot be marketed in that condition. On the facts of the given case, which is similar to the case sited above, the Central Excise Authorities are not correct in their view.

Answer 5. (b)

There is no specific rule covering such a contingency. Transaction value if respect of sales to unrelated buyers cannot be adopted for sales to related buyers since as per section 4(1) transaction value is to be determined for each removal. For sales to unrelated buyers valuation will be done as per Section 4(1)(a) and for sale to the related buyers residuary Rule 11 read with Rule 9 (or Rule 10) have to be followed. Rule 9 cannot be applied in such cases directly since it covers only those cases where all the sales are to related buyers only.

Answer 5. (c)

According to Rule 10(1)(c), royalties and license fees relatable to the imported goods shall be included in the price actually paid or payable for such goods. However, charges for right to reproduce will not be included in the assessable value.

The facts of the case are similar to that in State Bank of India v. CC [2000] 115 ELT 597 (SC) wherein the Supreme Court has held that –

(i) Since no separate value of the software has been indicated in the agreement except the license fee, therefore, the price was payable for only allowing the SBI to use the software in a limited way at its own centers for a limited period and therefore the same is called as license fees. Total cot incurred including the license fee for the countrywide use would be the transaction value on which Customs duty is to be paid.

(ii) The interpretative notes provide for exclusion of reproduction royalty. Countrywide use of the software and reproduction of software are two different things and license fee for countrywide use cannot be considered as charges for right to reproduce the imported goods because reproduction and use are two different things.

Accordingly, the total cost incurred, including the license fee for countrywide use of software, would be the transaction value on which customs duty was to be charged.

In view of what has been stated above, the contention raised by M/s. Super Infotech is incorrect. The amount of license fees relatable to the use of software at multiple locations is not reproduction royalty and hence, not excludible from the value of the consignment of computer software and manuals. M/s. Super Infotech shall be liable to pay customs duty on the total sum of Rs.50 lakhs.

Q. 6. (a) An importer has imported certain goods and while determining the assessable value, landing charges @ 1% of CIF value were added. The importer has claimed that actual landing charges are much lower than 1% of the CIF value in his case. You have been asked to advise whether the importer can file a bill of entry by adding actual landing charges instead of notional 1% of CIF value or not.

(b) While importing goods under Duty Free Import Authorisation (DFIA), should any customs duty be paid? Is the DFIA transferable?

(c) What is 'redemption fine' in lieu of confiscation? What is the limit for imposing redemption fine under section 125(1) of the customs Act, 1962?

Answer 6. (a)

The importer cannot file Bill of **Entry by** adding actual landing charges. Rule 3(2)(b) of Customs Valuation Rules, 1989 has statutorily laid down **a fixed 1% charge on free on** board value (F.O.B **Value)** of the **goods** plus the cost of transport plus the **cost of** insurance.

In *Wipro Ltd. Vs ACC,* it **was** held **that** handling charges of 1% of **CIF** Value, which is very nominal, are not arbitrary. It **has been** fixed under the power **conferred by the** Parliament on the rule making authority and such an act cannot be **considered beyond** the power conferred by **Section** 14(1) or Section **156** of the **Customs Act.** 1963. Accordingly, the importer should have filed Bill of Entry by adding the **statutorily fixed** 1% charges in the CIF value regardless **of the** actual handling charges being much lower in the present case.

Answer 6. (b)

Duty Free Import Authorisation (DFIA) has been introduced w.e.f. 1.5.2006. It is issued to allow duty free import of inputs, fuel, oil, energy sources, catalyst required for export products. Imports under DFIA will be exempted from payment of basic customs duty, additional customs duty/ excise duty, education cess, anti-dumping duty and safeguard duty, if any.

After export obligation is fulfilled, the scrip can be made transferable by Regional Authority. After endorsement f transferability, duty free inputs (except fuel) can be transferred.

Answer 6. (c)

Section 125(1) of Customs Act provides that whenever confiscation of goods is ordered, the adjudicating officer may give option to owner of goods to pay 'fine' in lieu of confiscation, if the importation or exportation of goods was prohibited. However, if importation or exportation of goods was not prohibited, the option to pay redemption fins shall be given to owner of goods. This is called 'redemption fine'. After payment of redemption fine, the goods are returned to the owner of goods. Section 125(2) of Customs Act makes it clear that where any fine in lieu of goods is imposed, the owner of goods or the person from whom the goods were seized, is liable to pay duty and charges in respect of such goods, in addition to the fine.

As per proviso to section 125(1) of Customs Act, fine shall not exceed the market price of goods less duty chargeable thereon [Of course, duty and charges (e.g. demurrage, storage charges, interest etc.) in respect of such goods is also payable, which is made clear in section 125(2) of Customs Act].

Q. 7. (a) The assessee imported capital goods and deposited them in warehouse. The said goods were not removed from the warehouse within the period permitted under section 61(1)(a) i.e., five years. Subsequently, the assessee filed an application for relinquishment of title of such warehoused goods.

The Department contended that since the assesee did not file an application for extension of warehousing period before the expiration of five years u/s 61(1)(a), after expiration of the said period, the goods could no longer be termed as' warehoused goods'. Therefore the assessee lost its title to the same and consequently it lost its right to relinquish its title thereto. It was further claimed that the relinquishment of title tot eh said goods ought to have been made by the assessee before the expiration of the warehousing of title and not thereafter and therefore the said goods were 'deemed to have been improperly removed from warehouse'. Consequently, the assesee became liable to pay duty, penalty and interest with respect to the said goods u/s 72 (1)(b) of the Customs Act.

(b) How will the value of goods be determined in a case where the price of goods is not known at the time and place of removal?

(c) Answer in brief the following questions relating to export without payment of duty other than to Nepal and Bhutan under Rule 19 of the Central Excise Rules, 2002 :

(i) What is the type of bond to be executed ? Who is exempted from furnishing such bond?

(ii) What is the export document for export clearance ? How many copies are required to be prepared for it?

(iii) What will be the duty payable, if goods are not exported within six months after clearance?

Answer 7. (a)

This High Court observed that the owner of the goods (importer) though loses control over the goods when he deposits them in the warehouse, but he does not lose his title or ownership to such goods so long as they remain in the warehouse either during the continuance of the warehousing period or even after its expiration.

The High Court pointed out that the provisions of section 23(2) and proviso to section 68 make it clear that upon relinquishment of his title to any imported goods, including the warehoused goods, the owner of such goods shall not be liable to pay duty thereon and whwn the owner is not liable to pay duty, the question of paying any interest on the duty and penalty would not arise. The Court however made it clear that interest and rent payable u/s 68 would be recoverable from the date of deposit of the goods in the warehouse to the date of relinquishment of title to goods. Thus, the High Court dismissed the Department's appeal.

CCus. V. i2 Technologies Software (P) Ltd. 2007 (217) ELT 176 (Kar).

Answer 7. (b)

Rule 4 of the Central Excise Valuation Rules, 2000 provides that in a case where the price of goods is not know at the time and place of removal, then valuation shall be done on the basis of the value of such goods (i.e. other goods of the same class of the same manufacturer), sold by the assessee for delivery at any other time nearest o the time of removal of goods in question. However adjustments in the value can be made on account of difference in the dates of delivery of such goods (i.e. other goods of the same class of the same manufacturer) and the goods in question as thought reasonable by the proper officer. Such a situation arises when the goods are not sold at the time of removal.

Answer 7. (c)

(i) Form B-1 Bond required, the bond value should be at least equal to the duty thereon. Merchant exporter-executes this bond for export without payment of duty.

The manufacturer exporter need not to furnish this bond, they can furnish a letter of undertaking (LUT) in form UT-1.

(ii) ARE-1 Form is the document for export clearance, it is to be prepared in sextuplicate.

(iii) If the goods are not exported within six months form the date of clearance from the factory, the exporter should pay the duty along with interest.

Q. 8. (a) Ms/ Naturocare Ltd. manufacturing a product called 'Himtaj Oil' (HO). The assessee contended that the product HO was a medicament under Chapter sub-heading 3003.31 of the CETA, 1985.

However, the stand of the Department was that the said product was a cosmetic/ toiletry preparation classifiable under Chapter heading 33.06, by considering common parlance test.

State whether stand taken by the department is correct in law?

(b) What is the meaning of 'normal transaction value' according to Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000?

(c) Explain whether profits made by dealer on transportation/insurance by charging more than the amount spent on actual transport/ insurance is includible in the assessable value for the purpose of Section 4 of the Central Excise Act, 1944.

Answer 8. (a)

As long as product has popular meaning and understanding which is attached to such products by those using the product and not to the scientific and technical meaning of the terms and expressions used. Hence, it is important to note how the consumer looks a t a product and his perception in respect of such product.

Moreover, merely because there is some change in the tariff entries, the product may not change its character. Therefore, it has to be classified as a hair oil and falls under cosmetics.

Hence, the Department stand is correct. CCEx., Nagpur v. Shree Baidyanath Ayurved Bhawan Ltd. 2009 (237) E.L.T. 225 (S.C.).

Answer 8. (b)

As per valuation rule 2(b), 'normal transaction value' means the transaction value at which the greatest aggregate quantity of goods are sold. The term 'GREATEST AGGREGATE QUANTITY' is used in rule 7 of Customs Valuation Rules. This rule states that while considering selling price of imported goods in India, unit price at which greatest aggregate quantity of identical or similar goods are sold to unrelated persons in India should be the basis. If ' normal transaction value' from the depot on date of removal from factory is not ascertainable, nearest day when clearance of identical goods were effected from depot or other place should be taken into consideration.

Answer 8. (c)

It was held in Baroda Electric Meters Ltd. v. CCEx [1997] 94 ELT 13 (SC) that where freight actually paid is less than the amount collected by way of freight and transportation charges, the differential amount will not be includible in the assessable value, since it is a profit made by dealer on transportation/ insurance by charging more than the amount spent on actual transport/ insurance will not be includible in the assessable value.

This judgment is applicable even now. Rule 5 provided for the deduction of average or equalized freight, which is computed as per principles of costing taking into account historical data. If average freight system is prevalent, the assessee would charge average freight from the buyer and get deduction therefore from the transaction value. However, the amount of average freight charged from buyer may exceed actual cost of transport incurred by the assessee. Thus, such excess charged form buyer i.e. profit made on transportation, shall not be includible in the assessable value.

Q. 9. (a) Whether sale of ready built flats is taxable under 'construction of complex service'?

(b) Write short note on - Rules for deciding subsidy or dumping margin.

(c) Astha Ltd. supplies raw material to a job worker Chaya Ltd. After completing the job-work, the finished product of 6,000 packets are returned to Astha Ltd. putting the retail sale price as Rs. 25 on each packet. The product in the packet is covered under MRP provisions and 40% abatement is available on it. Determine the assessable value under Central Excise Law from the following details :

Cost of raw material supplied	**Rs. 30,000**
Job worker's charges including profit	**Rs. 10,000**
Transportation charges for sending the raw material to the job worker	**Rs. 3,000**
Transportation charges for returning the finished packets to Astha Ltd.	**Rs. 3,000**

Answer 9. (a)

In the case of Greenview Land & Buildcon limited v. CCEx., Chandigarh 2008 (11) STR 113 (Tri –Del.)

The assessee was engaged in construction of complex without engaging any contractor or service provider in relation to it. The entire work was carried out by appellant as developer and builder and ready built flats were sold.

Tribunal observed that as per CBEC Circular No. 96/7/2007-S.T. dated 23-8-2007, if no other person is engaged in construction work and the builder/promoter/developer/any such person undertakes construction work on his own without engaging the services of any other person, then in such cases, (i) service provider and service recipient relationship does not exist, (ii) services provided are in the nature of self-supply of services. Therefore, Tribunal held that sale of ready built flats in the instant case was not taxable under 'construction of complex service'.

Answer 9. (a)

Rules for deciding subsidy or dumping margin - Central Government has been empowered to make rules for determining (a) subsidy or bounty in case of bounty fed goods (b) the normal value and export price to determine margin of dumping in case of dumping. Accordingly, Customs Tariff (Identification, Assessment and Collection of Anti-dumping duty on Dumped Articles and for determination of Injury) Rules, 1995 [Customs Notification No. 2/95 (N.T.) dated 1-1-95] provide detailed procedure for determining the injury in case of dumped articles.

Procedure for fixing anti dumping duty - After the 'designated authority' is satisfied about prima facie case, he will give notice to Governments of exporting countries. Opportunity to inspection of documents and making representations will be given to interested parties who are likely to be affected. Designated

Authority will first give preliminary finding and then final finding within one year. Provisional duty can be imposed on basis of preliminary finding which can continue upto 6 months, extendable to 9 months. Additional duty may be imposed on basis of the final finding.

As per rule 18 of Anti-Dumping Duty Rules, Central Government has to issue a notification fixing anti-dumping duty within three months from date of notification issued by designated authority.

Answer 9. (a)

In case of goods covered under MRP provision under section 4A of the Act, the valuation thereof will be done in accordance with the provisions of the said section and not as per the section 4, since section 4A has overriding effect over the provisions of section 4.

Accordingly, the assessable value of the goods shall be (Amounts in Rs.) –

Retail sale price of each packet	25
Less : 40% abatement	10
Assessable value per packet	15
Total assessable value (Rs. 15 × 6,000)	90,000

Q. 10. (a) Is service tax leviable on fee collected by Public authorities while performing statutory functions under the provisions of law?

(b) X Ltd. made an application under section 32E of the central Excise Act, 1944 to the settlement commission. The settlement commission was not satisfied saying that the application had not made a true and full disclosure of his duty liability and the manner in which same was arrived at was also not correct and rejected the application. The assessee contended that obligation to make truthful disclosure of duty liability would arise only after the application was admitted and not before that. Is plea taken by the assessee acceptable in law?

(c) In respect of a capital goods received by the manufacturer in July 2008 (duty paid Rs. 1,00,000), 50% i.e. Rs. 50,000 credit was taken in November 2008, balance 50% credit was taken in April 2009. The capital goods was installed in January 2009 and were sold as second hand capital goods after use in July 2010.The duty paid at the time of purchase has been utilized against payment of duty in the year 2008-09 and 2009-10. What is the total amount of excise duty, if any, payable by the manufacturer at the time of removal of capital goods?

Answer 10. (a)

There are some services which are assigned to and rendered by the Public authorities or in the nature of 'statutory functions'. To name few service, Regional Transport Officers (RTO) issue fitness certificate to motor vehicles, Directorate of Boilers inspects issue certificates for boilers or Explosive Department inspects and issues certificate for petroleum storage tank, LPG/CNG tank in terms of provisions of the relevant laws. The authorities performing such functions are required to collect fee for the services and deposit the same into the account of government. Such activities are purely in public interest and are undertaken s mandatory and statutory functions. These are not to be treated as services provided for a consideration. Therefore, such activities assigned to and performed by a public authority under the provisions of any law, do not constitute taxable services. Any amount/ fee collected in such cases are not to be treated as consideration for the purpose of levy of service tax.

Answer 10. (b)

The application can be accepted only when Settlement Commission was satisfied that the applicant had made a full and true disclosure of duty liability and the manner in which same was arrived at. The object behind the enactment of the provisions relating to settlement was the creation of a forum for self-surrender. The Settlement Commission was constituted as an extraordinary measure for providing an opportunity to such persons to make a true confession and to have matters settled once for all.

Therefore, assessee's plea that obligation to make truthful disclosure of duty liability would arise after application was admitted and not before that, was not acceptable. Cus. & CCEx Settlement Commissioner v. Mars Therapeutics & Chem. Ltd. 2008 (223) ELT 363 (AP).

Answer 10. (c)

If capital goods are removed as second hand capital goods after use, the manufacturer or output service provider shall pay an 'amount' (not 'excise duty') equal to Cenvat credit taken on the said capital goods, reduced by 2.5% for each quarter of a year or part thereof from the date of taking the Cenvat credit, except in case of computers (w.e.f. 13.11.2007)

Here, quarters involved are 8 (2008-1, 2009-4, 2010-3) for first 50% and 6 (2009-3, 2010-3) for balance 50%.

Thus, assessee can get deduction of 20% of first Rs. 50,000 (Rs. 10,000) and 15% of balance Rs. 50,000 (Rs. 7,500). He has to pay 'amount' of Rs. 82,500 (1,00,000 – 10,000 – 7,500).

The buyer can avail Cenvat credit of this 'amount' as made clear in rule 3(6) of Cenvat Credit Rules. Hence, seller should clear the second hand capital goods under 'invoice' charging 'amount' in invoice (not excise duty).

Q. 11. (a) When does a small service provider require to register under the Service Tax Act, but not liable to collect and pay Service Tax?

(b) A manufacturer who exports goods gets his inputs without payment of duty under Notification No. 43/2001 CE(NT) dated 26.02.2001. Briefly state with reasons whether the manufacturer could export goods under claim of rebate under Rule 18 of the Central Excise Rules, 2002.

(c) Discuss whether Cenvat credit can be availed in respect of goods used for manufacture of capital goods within the factory and in respect of inputs for effluent treatment plant.

Answer 11. (a)

The service provider has to register himself under service tax once the value of taxable services breaches the threshold limit of Rs. 9 lakhs. However, service tax need not be collected and paid till the value of taxable services exceeds Rs. 10 lakhs.

Answer 11. (b)

The conditions governing the procurement of inputs without payment of duty under Notification No. 43/ 2001 CE (NT) dated 26.06.2001 specifically mandate that such inputs and goods manufactured or processed using such inputs should be exported without payment of duty under Rule 19(1) OF THE Central Excise Rules, 2002 and the procedure for export without payment of duty should be followed.

Therefore, in the given case, the manufacturer cannot export the goods, manufactured out of inputs procured without payment of duty, under claim of rebate under Rule 18 of Central Excise Rules, 2002.

Answer 11. (c)

As per explanation 2 to definition of 'input', 'Input' includes goods used in the manufacture of capital goods which are further used in the factory of the manufacturer but shall not include cement, angles, channels, Centrally Twisted Deform Bar (CTD) or Thermo Mechanically Treated bar (TMT) and other items used for construction of factory shed, building or laying of foundation or making of structure for support of capital goods.

In Indian Farmers Coop Ltd. v. CCE – 86 ELT 177 (SC) + AIR 1996 SC 2542 = 1996 (5) SCC 488 + 15 RLT 498, it has been held that treatment of effluents is an essential and integral part of the process of manufacture of plant. The apparatus used for such treatment of effluents in a plant manufacturing a particular end-product is part and parcel of the manufacturing process. Hence, inputs used in the effluent treatment plant will be treated as 'used in the manufacture'. It was also held that inputs used indirectly in the manufacture will also be 'in the manufacture'. It is not essential that to qualify itself as a raw material, it had necessarily and in all cases to go into and be found in the end-product.

Q. 12. Mr. Bakshi, a service provider, has provided services of RS. 4,00,000 in 2009-10. Out of this, Rs. 2,50,000 are taxable output services and Rs. 1,50,000 are exempt output services. Service tax paid on his input services (excluding education cess and SAH education cess) is Rs. 4,000 which do not include any service specified in rule 6(5) of Cenvat credit rules. Rate of basic service tax is @ 10%.

Calculate the service tax in each of the following cases :

(i) If out of Rs. 4,000 of service tax paid by Mr. Bakshi on his input services, Rs. 1,000 are in respect of exempt output services and Rs. 3,000 pertains to taxable output services.

(ii) Mr. Bakshi not maintains separate books of account and willing to pay an 'amount'.

(iii) Mr. Bakshi wants to pay amount by reversing proportionate amount of input tax credit [Rule 6(3)(ii)].

Answer 12.

Calculation of service tax payable :

Case – (i)

	Rs.
Taxable output services	2,50,000
Service tax @ 10% on Rs. 2,50,000	25,000
Less : Cenvat credit allowed (on taxable output service)	3,000
Net service tax payable	22,000

Case – (ii)

If the service provider is not maintaining separate books of account and using common input service to provide taxable as well as exempted output services, he can opt to pay 'amount' of 6% of 'value of exempted services' [Rule 6(3)(i)].

		Rs.
Taxable output services		2,50,000
Service tax @ 10% on Rs. 2,50,000	(a)	25,000
Exempted output services		1,50,000
'Amount' @ 6% on RS. 1,50,000	(b)	9,000
Total service tax liability	(a + b)	34,000
Less : Cenvat credit allowed		4,000
Net service tax plus amount payable		30,000

Case – (iii)

If assessee intends to pay amount on proportionate basis as provided in rule 6(3)(ii) (w.e.f. 1.4.2008), the 'amount' is to be calculated as provided in rule 6(3A) of Cenvat Credit Rules. He has to pay 'amount' provisionally on monthly basis. At the year-end, he has to calculate exact amount and pay difference if any or adjust excess amount paid.

Calculation of percentage of exempted services on total services :

1,50,000/ 4,00,000 = 37.50%

	Rs.
Pay an amount @ 37.5% on Rs. 4,000	1,500
Service tax @ 10% on Rs. 2,50,000	25,000
Total liability of service tax	26,500
Less : Cenvat credit allowed	4,000
Net service tax liability	22,500

Note : Service tax is subject to education cess @ 2% and SAH education cess @ 1%.

Q. 13. (a) Fresh Drink Ltd. manufactured a 'syrup' containing soft-drink concentrate and sugar and sold the same to their marketing subsidiary M/s. Soft Drink Marketing Co. A part of the syrup was sold to others also. The marketing company would sell the same to retailers.

The marketing company used to lease out dispensing machines to retailers. The dispensing machine was used for dilution and carbonation of the syrup for sale of soft-drink to consumers.

Fresh Drink Ltd. paid central excise duty on its transaction value i.e. sale price to marketing subsidiary. Department held that since the assessee and the marketing subsidiary were related person, therefore, the assessable value shall be the sale price of the marketing subsidiary, that too without deducting discounts allowed by marketing subsidiary to its buyers. Further, the lease rental paid by the retailers to the marketing subsidiary towards dispensing machine was also held includible in assessable value.

Whether the Department was correct in computing the assessable value of the goods?

(b) Explain whether assembly amounts to manufacture.

(c) Can a branch office avail the Cenvat credit in respect of inputs used in providing taxable services when, the bills in respect of the said input is in the name of head office?

Answer 13. (a)

When trade discount has been indicated in the invoices at the time of sale and there is no flowback/return of trade discount to the assessee-seller or its related person, the assessable value shall be computed after deducting such trade discount. Even if the valuation was sought to be made based on the sale price of the related person, the deduction of discount couldn't be denied.

Sale of syrup and leasing of dispensing machine are separate activities with separate considerations. Even the definition of 'transaction value' doesn't permit the inclusion of consideration for different activity in the assessable value of excisable goods. 'Transaction value' includes any additional amount charged as price, by reason of or in connection with the sale of the goods under assessment; it doesn't include amounts charged in connection with or by reason of sale of other goods or provision of other services. Therefore, the lease charges cannot be included in the assessable value of the syrup.

CCEx. V. Pepsico India Holdings (P) Ltd. [2009] 234 ELT 385 (SC).

Answer 13. (b)

Assembly of the components/ parts resulting in the emergence of a finished product which has a distinct character and use will amount to manufacture. The basic test is whether the process of assembling of the parts or components resulted in the transformation which has made the product to have a distinct character and use and having a separate entry in the tariff. If this condition is satisfied then 'manufacture' is said to have taken place.

For instance, in B.P.L. India ltd. c. CCEs [2002] 143 ELT 3 (SC), it was held by the Apex court that the assembly of imported kits into VTRs and colour monitors by using the fasteners constituted the process of manufacture, since pursuant to such process, a transformation has taken place in the hands of technical experts, which made the product have distinct character and use.

However, if the assembly of the duty paid parts or components does not result in the emergence of an entirely new and distinct article having a different characteristics it will not result in to manufacture.

Answer 13. (c)

Credit where inputs/ capital goods received by one office of output service provider, but, purchase invoice received by another office of such service provider [Rule 7A] : If –

(i) A provider of output service receives any inputs or capital goods, but,

(ii) The invoice towards purchase of inputs and capital goods is received by another office or premises of the such provider of output service,

Then, the provider of output service can take credit on such inputs and capital goods on the basis of an invoice or a bill or a challan issued by such another office or premises of such provider of output service.

For this purpose, such another office or premises shall follow the same procedure/ conditions as are applicable to a first stage dealer or a second stage dealer under the Act or any rules made thereunder.

Q. 14. (a) Discuss whether Cenvat credit will be admissible in the following cases :

(i) Inputs contained in waste etc.

(ii) Inputs burnt up or consumed in manufacture & not retaining identity in end-product.

(iii) Materials used for maintaining factory building.

(b) M/s. A Ltd., manufacturing excisable goods, paid the differential duty, suo moto, to the Department as the prices of the said goods were revised with retrospective effect. The Revenue took the view that the assessee was liable to pay interest on differential duty under section 11 AB of the Central Excise Act, 1944 and penalty thereof. The assessee replied that there was no question of charging interest and penalty as the payment of differential duty was made by it at the time of issuing supplementary invoice to the customers.

Discuss, whether the view taken by the Revenue is justifiable.

(c) Which goods are not covered under VAT?

Answer 14. (a)

(i) Inputs contained in waste etc. – YES, Cenvat credit shall be admissible in respect of amount of inputs contained in any of the waste, refuse or by-product. Similarly, Cenvat credit should not be denied even if intermediate product is exempt from duty. The basic idea is that Cenvat credit is admissible so long as inputs are used in or in relation to the manufacture of final products.

(ii) Inputs burnt up or consumed in manufacture & not retaining identity in end-product – YES, Cenvat credit is admissible on inputs used in or in relation to manufacture of final product whether or not they are contained in the final product. Thus, inputs burnt up or consumed in manufacture process and not retaining identity in the end product will be eligible for Cenvat credit. [Eastern Electro Chemical Industries v. CCEx. (2005) 181 ELT 295 (SC)]

(iii) Materials used for maintaining factory building – NO. Goods used in or in relation to manufacture of final products and also goods used in the manufacture of capital goods qualify as 'inputs' and credit is admissible thereon. Immovable properties are not 'capital goods', the only exception being storage tank. Hence, materials used for maintaining factory building are not 'inputs' because neither they are used in or in relation to manufacture of final product nor in manufacture of capital goods.

Answer 14. (b)

If, before service of notice on him, the assessee voluntarily pays the full amount of duty, which is not levied or short-levied or not paid or short-paid or erroneously refunded, along with interest due under section 11AB –

(i) On the basis of his own ascertainment of the duty or on the basis of duty ascertained by a Central Excise officer, and

(ii) Informs the Central Excise Officer or the proper officer of such payment in writing,

Then, no show cause notice will be served on him in respect of the duty and interest so paid. [Section 11A(2B)].

Section 11A(2B) further provides that no penalty under any of the provision of this Act or the rules made thereunder shall be imposed in respect of payment of duty under this sub-section and interest thereon.

Section 11AB provides that in case any duty has not been levied or short-levied or not paid or short-paid or erroneously refunded, then, interest is payable thereon @ 13% p.a. Such interest for late payment is payable even in cases of fraud, collusion, willful mis-statement or suppression of facts or contravention of any of the provisions of the Act or the rules made thereunder and also in cases of voluntary payment of duty.

So, in the given case, no show cause notice would be issued on M/s. A Ltd., but it should pay the interest and no penalty will be levied.

Answer 14. (c)

Generally, all goods, including declared goods, are covered under the VAT-laws of respective States and, thus, get the benefit of input-tax credit. However, the following goods are outside the VAT are –

(i) Petrol, diesel, Aviation Fuel (ATF) or other motor spirit,

(ii) Liquor and

(iii) Lottery tickets.

These will continue to be taxed under the State-tax Act or any other State Act or even by making special provisions in the Vat Act itself at uniform floor rates described by the Empowered Committee. Thus, the States may or may not bring these commodities under VAT laws. However, it has been agreed that all these commodities will be subjected to 20% rate of tax.

Q. 15. (a) Write a note on Taxpayers' Identification Number (TIN)?

(b) What is carrying over of input-tax credit? When is refund of unutilized input-tax credit allowed?

(c) Write short note on – Value of goods and tooling supplied by buyer under the Customs Act.

Answer 15. (a)

TIN is a 11-digit numerical code allotted to every dealer obtaining registration under the VAT-law. It is the registration number, which is intended to identify a tax payer.

The 11-digit numerical code shall be made as follows :

(i) First 2 –digits: State code as used by the Union Ministry of Home Affairs

(ii) Next 9-digits : Code allotted by each state to the registrant.

TIN will facilitate computer applications, such as detecting stop filers and delinquent accounts. TIN is required to be stated on each invoice, hence, TIN will help cross-check information on tax payer compliance, for example, the selective cross-checking of sales and purchases among VAT taxpayers.

Answer 15. (b)

Input-tax credit is to be utilized, sequentially, as under –

(i) For payment of VAT;

(ii) Excess credit remaining, if any, can be adjusted against CST for the relevant period.

If, after set-off against VAT and CST payable for the concerned period, there remains any excess of input VAT credit, the same will be eligible to be carried forward to the next tax-period and so on upto the next financial year.

If there is any excess unadjusted input tax credit at the end of second year, then the same is required to be claimed as refund. However, some States grant refund after the end of first financial year itself.

Answer 15. (c)

Value of goods and tooling supplied by buyer – If buyer has supplied goods free of cost or at reduced cost in connection with production or export of goods, these should be included. The good may be (i) materials, components, parts and similar items incorporated in imported goods, (ii) tools, dies moulds and similar items used in production of imported goods (iii) consumables used in production of imported goods [Rule 9(1)(b)(i), (ii) and (iii)].

The inclusion is necessary as price of imported goods would certainly have been higher if the parts etc. were not supplied by buyer. Section 12, which is charging section, specify that 'Customs duty' is on 'goods'. Section 14 specifies that value of 'such goods ordinarily sold' should be considered. Thus, 'ordinary price' of 'such goods' can be ascertained only after adding cost of such free material supplied by buyer.

Ascertaining cost of tooling – Cost of tooling supplied by importer to exporter should be ascertained as follows : (i) If importer has purchased the tooling from unrelated seller, the purchase cost should be considered or (ii) if he has manufactured the tooling himself, the cost of production of tooling should be considered. If the tooling was previously used by importer, its original cost of purchase or cost of production should be suitably reduced (e.g. by suitably depreciating the cost) to reflect its present cost.

Q. 16. (a) A, a non-resident intends to import certain goods but has some doubts about their classification. B has obtained an Advance Ruling under Chapter V-B of the Customs Act, 1962 from the authority for advance rulings on a identical product. A proposes to adopt the same ruling in his case.

A has sought your advice as a consultant whether he could adopt the said ruling as given in case of B.

(b) When an advance ruling will be held as void ab initio?

(c) The Metro Airport used to collect 'users fee" @ Rs. 750/- for every outgoing international passenger. No users fee was payable by domestic passengers and/or international passengers reaching the Airport from any foreign destination.

The Department sought to levy service tax thereon under 'Airport Services'.

The Metro Airport contended that the user's fee is not for any service rendered, a s the same is not charged from all passengers (to whom equivalent services are provided) but is charged only from outgoing international passenger. The assessee submitted that the same is charged in view of Board of Director's decision to collect users development fee 'for enhancing the revenue of the Airport to cope up with the expenditure and debt servicing?

Discuss, whether the view taken by the Department is correct.

Answer 16. (a)

Applicability of advance ruling [Sec 23E (corresponding Customs section 28)] : The Advance ruling pronounced by the Authority is binding only –

(i) On the applicant who had sought it.

(ii) In respect of the matter for which advance ruling was obtained.

(iii) On the Commissioner, and the authorities subordinate to him, in respect of the applicant.

Hence, in the given case, the ruling obtained by B shall be applicable only on B and on the Commissioner of Customs and his subordinate authorities in relation to the matter in respect of which the advance ruling was pronounced. Therefore, A cannot adopt the ruling as given in case of B and he has to obtain advance ruling in respect of his own case.

Answer 16. (b)

Section 23F (Corresponding Customs section 28K) provides that if, on a representation made to it by the Commissioner or otherwise, the authority for advance ruling finds that the advance ruling was obtained by the applicant by fraud or misrepresentation of facts, then, the Authority may, by order, declare the advance ruling to be void ab initio i.e. from the beginning itself.

When an advance ruling is declared to be void under this section, then, all the provisions of this Act shall apply to the applicant as if such advance ruling had never been made, and, for this purpose, the period beginning with the date of such advance ruling and ending with the date of order of declaration of the advance ruling as void, shall be excluded.

Answer 16. (c)

It was clear from the decision of the Board of Directors that purpose of users fee was to augment revenue for the Airport and was not towards consideration for any service rendered to the outgoing international passenger. This was so especially because the airport had rendered its services equally to all passengers (incoming and outgoing – domestic and international) while the users fee was charged only from outgoing international passengers.

Section 67defining value of taxable services for charging service tax says that the value of service shall be gross amount charged by the service provider for the service provided to the recipient. Since collection of users fee was not for any specific service rendered by them, but was a flat rate of charge to one category of passengers namely, outgoing international passengers, it could not be said that the amount so collected was by way of service charge. Hence, no service tax was payable.

Q. 17. Real Construction, a real estate developer, is engaged in construction of a residential complex (consisting of more than 20 houses) named Southern Green for Superior Builders. Other details are as follows :

	Rs.
Contracted price (excluding VAT, if leviable)	**50,00,000**
Steel supplied by Superior Builders to Real Construction	**2,00,000**
Excise duty paid on capital goods used in providing construction service	**80,000**
Excise duty paid on inputs used in relation to construction service	**34,000**
Service tax paid on input services used in construction service	**50,000**

Find out the net service tax payable by X Ltd. if —

(i) Contracted Price involves the transfer of property in goods and materials worth Rs. 5,00,000 and VAT Rs. 20,000, X Ltd opted for payment of service tax on composition scheme.

(a) if the contract execution of works contract has already started on or before the date of 7-7-2009,

(b) if the contract execution of works contract has been started after 7-7-2009

(ii) Contract does note involve the transfer of property. However, X Ltd opted to avail the abatement @ 67%.

Answer 17.

(i) (a) Contract involves the transfer of property and composition scheme opted.

		Rs.
Contract Price	=	50,00,000
Service Tax 4.12% × 50,00,000	=	2,06,000
Less : Input tax credit on input capital goods Rs. 80,000 × 50%	=	40,000
Input tax credit on input services	=	50,000
Net liability on output service	=	1,16,000

Note : input tax credit on input goods not allowed.

(i) (b) Contract involves the transfer of property and composition scheme opted.

		Rs.
Contracted Price	=	50,00,000
Add : Material supplied by Superior Builders	=	2,00,000
		52,00,000
Service Tax 4.12% × 52,00,000	=	2,14,240
Less : Input tax credit on input capital goods Rs. 80,000 × 50%	=	40,000
Input tax credit on input services	=	50,000
Net liability on output service	=	1,24,240

Note : input tax credit on input goods not allowed.

(ii) Contract does not involve the transfer of property and abatement claimed.

		Rs.
Contracted Price		50,00,000
Add : Material supplied by Superior Builders		2,00,000
Gross Amount		52,00,000
Less : abatement @ 67%		34,84,000
Net amount		17,16,000
Service tax payable = 17,16,000 × 10.30%	= Rs.	1,76,748

CENVAT credit on input goods, capital goods and input services are not allowed.

Q. 18. S Ltd. give the following details for the month of March, 2011.

Particulars	Purchases	Sales
Intra State	**8,00,000 (12.5%)**	**6,00,000 (4%)**
Intra State	**5,00,000 (CST – 2%)**	**9,00,000 (CST – 2%)**

Out of Rs. 8 lakhs Intra state purchases Rs. 75,000 were from unregistered dealer; Rs. 50,000 from registered dealers who opt for composite scheme; Rs. 25,000 worth goods used in manufacturing of taxable goods intended for exports.

Compute the VAT Credit available for set off and carry forward purposes.

Answer 18.

Computation of eligible purchases for computation of VAT credit.

Particulars	**Amount Rs.**	**Remark**
Intra State purchases		
- From unregistered dealer	75,000	Ineligible purchase
- From registered dealer who opt for composite scheme	50,000	Ineligible purchase
- Goods used in manufacturing of taxable goods intended for exports	25,000	Eligible purchase
- Others	6,50,000	Eligible purchase
Intra State purchase	5,00,000	Ineligible purchase

Total Eligible purchases is Rs. 6,75,000.

Computation of VAT credit eligible for cary forward.

Particulars		**Notes**	**Amount Rs.**	**Amount Rs.**
a	Eligible purchase		6,75,000	
b	Input tax paid @ 12.5% (Input tax)	a * 12.5%		84,375
c	Intra state sales during the month		6,00,000	
d	Tax @ 4% on sales of goods	c * 4%		24,000
e	Net VAT liability during the month	d – b, if positive		Nil
f	Input credit after set-off	b – d		60,375
g	Inter-state sales		9,00,000	
h	CST liability to be paid on inter-state sales	g * 2%		18,000
i	**Credit to be carried forward**	f – h		**42,375**

Q. 19. The manufacturer purchases the input material from a unit of Free Trade Zone (100% EOU). This is considered as deemed import. Hence he has to pay Customer duty, Additional customs duty etc. Hence cenvat credit for such a deemed importer is allowed.

Suppose the Assessable value of the goods purchased from a unit of Free Trade Zone for Rs. 1,000. Say the customs duty is 10%, the Additional Customs Duty is 10.30% (i.e. BED plus applicable cess). These good attract value added tax @ 4%. Then the Cenvat credit will be as follows :

Answer 19.

Particulars	Rate of duty	Amount Rs.	Duty Rs.	Remarks
Assessable value		1000		
Add : BCD 50% of 10%	5%	50	50	1,000 × 5/100
CVD :				
Add : Basic Excise Duty	10%	105	105	[1,050 × 10/100]
Add : Education cess	2%	2.10	2.10	[105 × 2/100]
Add : SAH Education cess	1%	1.05	1.05	[105 × 1/100]
Sub total		1158.15	158.15	
Add : Education cess	2%	3.163	3.163	[158.15 × 2/100]
Add : SAH Education cess	1%	1.58	1.58	[158.15 × 1/100]
Sub total		1,162.89	162.89	
Add : Spl. CVD		Nil	Nil	No. Spl. CVD since, VAT payable in the state
Sub total		1,162.89	162.89	
Add : Education cess	2%	3.26	3.26	[162.89 × 2/100]
Add : SAH Education cess	1%	1.63	1.63	[162.89 × 1/100]
Total		**1144.**84	144.84	

Cenvat credit could be allowed to the buyer (i.e. manufacturer) who procures from EOU is as follows :

CVD to the extent of Basic Excise Duty	Rs. 150.00
Spl. CVD	Rs. Nil
Education cess	Rs. 3.26
SAH Education cess	Rs. 1.63
Total Cenvat Credit allowed	Rs. 154.89

Note : (1) Special Additional Customs Duty (known as SAD or Spl. CVD) under Section 3(5) of the Customer Tariff Act will be payable if goods cleared in DTA are exempt from sales tax or VAT. If VAT or sales tax is payable, Spl. CVD is not payable (*vide* Notification No. 23/2003-CE, dated 31.3.2003).

Q. 20. An importer has imported a machine from UK at FOB cost of 10,000 UK pounds. Other details are as follows :

(a) Freight from UK to Indian port was 700 pounds.

(b) Insurance was paid to insurer in India : Rs. 6,000

(c) Design and development charges of 2,000 UK pounds were paid to a consultancy firm in UK.

(d) The importer also spent an amount of Rs. 50,000 in India for development work connected with the machinery.

(e) Rs. 10,000 were spent in transporting the machinery from Indian port to the factory of importer.

(f) Rate if exchange as announced by RBI was : Rs. 68.82 = 1 UK pound.

(g) Rate of exchange as announced by CBE &C (Board) by notification u/s 14(3)(a)(i) : Rs. 68.70 = 1 UK pound

(h) Rate at which bank recovered the amount from importer : Rs. 68.35 = 1 UK pound.

(i) Foreign exporters have an agent in India. Commission is payable to the agent in Indian Rupees @ 5% of FOB price.

Customs duty payable was 10%. If similar goods were produced in India, excise duty payable as per tariff is 14%. There is an excise exemption notification which exempts the duty as is in excess of 10%. Education cess is as applicable. Special CVD is payable at applicable rates. Find customs duty payable. How much Cenvat can be availed by importer, if he is a manufacturer?

Answer 20.

UK Pounds	
FOB value	10,000
Add : Design & development charges	2,000
Add : Ocean freight	700
Total C & F	12,700
	Rs.
Total in Rs. @ 68.70 × 12,700	8,72,490
Add : Insurance	6,000
Add : Commission paid to foreign exporter agent	
[@5% x 10,000 UK Pounds × 68.70]	34,350
Cost, Insurance and freight	9,12,840
Add : Loading and unloading charges @ 1% on 9,12,840	9,128
Assessable value	9,21,968
Add : Basic customs duty @ 10% x 9,21,968	92,197
	10,14,165
Add : Additional customs duty (CVD) [@10.30% × 10,14,165]	1,04,459
	11,18,624
Add : Education cess @ 2% on (92,197 + 1,04,459)	3,933
Add : Secondary and higher secondary cess	1,967
	11,24,524
Add : Special additional customs duty [@ 4% x 11,24,524]	44,981
Imported value	11,69,505

Types of duties	Value (Rs.)	Remarks
Basic customs duty	92,197	No, cenvat credit allowed
Additional customs duty (CVD)	1,04,459	Cenvat credit allowed
Special additional customs duty	44,981	Cenvat credit allowed

Note :

(i) If the importer is only a dealer, he can get refund of special additional duty of Rs. 44,981, on the basis of payment of VAT.

(ii) Design and development work done in India and transport costs within India are not to be considered for purposes of ‘Customs Value’.

(iii) Excise duty rate has to be considered after considering excise exemption notification.

(iv) Assessable value and final duty payable should be rounded off to nearest rupee.

(v) Basic excise duty plus education cess plus SAH is equal to Additional Customs Duty (CVD).

Q. 21. Tarun & Co. is a dealer in an electronic product, chargeable to CSt at 2%. For the year ended 31.3.2010, the dealer has shown total turnover (including CST) at Rs. 38,76,000. IN the above, the dealer has treated the following amounts thus :

		Rs.
(i)	**Dharmada collected from buyers, shown separately in invoice**	**28,000**
(ii)	**Weighment charges incidental to sale**	**14,000**
(iii)	**Central excise duty collected (including cess)**	**2,06,000**

The dealer has recorded the following amount in separate folios in the ledger :

(i)	**Packing charges (these have been collected from buyers through debit notes)**	**45,000**
(ii)	**Cash discount allowed to buyer**	**18,000**
(iii)	**Indemnity/ guarantee charges collected from buyer to cover loss during transit**	**12,000**
(iv)	**Marine insurance premium for transporting goods to the premises of buyers, collected from buyers**	**32,000**

Determine the total and taxable turnover under CST Act, 1956 for the financial year 2009-10. You required to show the treatment of each and every item distinctly.

Answer 21.

Determination of turnover for CST purposes	**Rs.**
Turnover including CST as per books	38,76,000
Less : CST included in above 38,76,000 × 2/102	76,000
Turnover as per books excluding CST	38,00,000
Add : Packing charges	45,000
Marine insurance	32,000
Taxable turnover	38,77,000
Add : CST @ 2% of 38,77,000	77,540
Total turnover	39,54,540

Q. 22. (a) An Assessee, who is a multiple service provider, files only a single return. State with reasons whether he can do so?

(b) Write short notes on – Meaning of “Accessory” for excise duty purposes.

(c) An exporter exported 2,000 pcs. Of leather bags @ Rs. 750 per pc. All Industry rate of drawback is fixed on average basis i.e. @ 11% of FOB subject of maximum of Rs. 80 per pc. The exporter found that the actual duty paid on inputs was Rs. 1,95,000. He has approached you, as a consultant, to apply under rule 7 of the drawback rules for fixation of ‘special brand rate’. Advise him suitably.

Answer 22. (a)

A single half yearly return would suffice even if the assessee provides more than one service. However, details in the relevant columns in Form ST-3/ST-3A should be furnished separately for each of the taxable service for which the service tax assessee is liable to file the returns. Therefore, he can file a single return for the multiple services provided by him.

Answer 22. (b)

Accessory means 'an object or device not essential in itself but adding to beauty, convenience or effectiveness of something else.

The meaning of the term 'accessory' has been considered in various judgements.

Accessories of a machine promotes the convenience and better utilization of the machine but nevertheless they are not machine itself – CCE v ACER India Ltd. (2004) (172 ELT 289: 2004 AIR SCW 5495). In this case, it was held that software is not part of computer even if it is preloaded on computer.

In Mehra Bros v. Joint Comm. AIR 1991 SC 1017, it was held that accessory is an adjunct or an accompaniment or an addition for convenient use of another part of main article, or adds beauty, elegance or comfort for the use of main article, or a supplementary or secondary to the main or primary importance. In this case, it was held that car seat cover is an accessory of automobile.

It was also held that it is not necessary that the accessory must add to the conveniences or effectiveness of the article as whole (i.e. if it adds conveniences or effectiveness to only one part of the main article, that is enough).

In United Copies (India) P Ltd. v CST (1996) 101 STC 536 (SC), it was held that accessory means a person or thing that aids subordinately, an adjunct, appurtenance, accompaniment. In this case, it was held that rubber flap is not an accessory of motor car. It may be accessory of 'tyre' was mentioned separately, court did not pursue the issue whether accessory of part is part of main vehicle.

Answer 22. (c)

Drawback amount Rs. 1,65,000 (i.e. 2,000 x 750 x 11%) or Rs. 1,60,000 (i.e. Rs. 80 x 2,000) whichever is less.

Therefore duty drawback allowed is Rs. 1,60,000

All industry duty drawback rate = 82.05% [(1,60,000/1,95,000) x 100%]

Exporter is not eligible to apply for special brand rate.

Special brand rate of duty is applicable only when all industry rates do not cover 80% of the duties paid by the exporter.

Q. 23. (a) State whether the principle of 'unjust enrichment' shall be applicable in the following cases –

- **(i) Refund of duty paid on raw materials, which have been captively consumed.**
- **(ii) Refund of duty paid on provisional basis under Central Excise.**
- **(iii) Refund of amount paid as pre-deposit for filing appeal.**
- **(iv) Refund of excess interest paid by the assessee.**

(b) What is the time limit for confirmation of demand sought to be raised by a show-cause notice?

Answer 23. (a)

(i) YES – It has been held in UOI v Solar Pesticides (P) Ltd. [2000] 116 ELT 401 (SC) that the burden of duty can be passed on either directly or indirectly. In case the raw materials, on which the refund arises, have been captively con summed and the finished goods manufactured thereform are sold, it is presumed that the incidence of duty has been passed on. Hence, the doctrine of 'unjust enrichment' shall be applicable to refund of duty paid on captively consumed raw materials also.

(ii) YES – Rule 7 of Central Excise Rules, 2002 provides that in case the duty is paid on provisional basis and a situation of refund arises, then, such a refund will be granted to the manufacturer only if he has not passed on the incidence of duty to any other person. Hence, the concept of doctrine of 'unjust enrichment' is applicable for duty assessed on provisional basis also.

(iii) NO – Until the pendency of the appeal, the amount deposited as a condition of pre-deposit cannot be termed as duty. Hence, the refund thereof cannot be termed as refund of 'duty' and thus, such refund does not fall within the ambit of section 11B. thus, the doctrine of 'unjust enrichment' and time limit of section 11B/ 27 is not applicable to refund of such pre-deposit. – CCEx v. Atul Industries [2004] 168 ELT 353 (Tri).

(iv) YES – Customs Section 27 (and excise section 11B also) speaks of duty as well as interest, if any, paid thereon. Therefore, the refund of excess interest paid by assessee is also hit by bar of unjust enrichment.

Answer 23. (b)

Where a show-cause notice has been served on any person under section 11A, then, the proper officer shall, where it is possible to do so, confirm the demand within the following time limit –

(i) In case any duty/ interest has not been levied or paid or has been short-levied or short-paid or erroneously refunded, by reason of fraud, collusion or any willful mis-statement or suppression of facts, or contravention of any of the provisions of this Act or of the rules made threunder, with an intent to evade payment of duty, within one year from the date of service of show cause notice; or

(ii) In any other case, within a period of six months from the date of service of the show cause notice.

Q. 24. (a) What are the appealable orders to Supreme Court?

(b) Mr. Sandip Roy, an Indian resident, aged 40 years, returned to India after visiting Canada on 20.5.2011. He had been to Canada on 02.05.2011. On his way back to India he brought following goods with him –

(i) His personal effects like clothes etc. valued at Rs. 40,000

(ii) 1 litre of Wine worth Rs. 1,000

(iii) A video cassette recorder worth Rs. 11,000

(iv) A microwave oven worth Rs. 20,000

What is the customs duty payable?

Answer 24. (a)

Section 35L of the Central Excise Act, 1944 states that the following types of orders are appealable t the Supreme Court –

(i) Any judgement of High Court delivered in an appeal made u/s 35G, in any case which, on its own motion or on an oral application made by or on behalf of the party aggrieved, immediately after passing of the judgement, the High Court certifies to be a fit one for appeal to the Supreme Court; or

(ii) Any order passed by the Appellate Tribunal relating, among other things, to the determination of any question having a relation to the rate of duty of excise or to the value of goods for purposes of assessment.

In case the judgement of the High Court is varied or reversed by the Supreme Court, then the judgement of Supreme Court shall prevail.

In case the High Court doesn't certify it to be fit case for appeal to the Supreme Court, a Special Leave Petition can be filed before the Supreme Court as provided by Constitution of India.

Answer 24. (b)

Under Rule 3 of the Baggage rules, Mr. Roy, being of more than 10 years of age with stay of more than 3 days, is eligible for the following general free allowance –

(i) Used personal effects of any amount; and

(ii) Other articles, other than those mentioned in Annex. I, upto a value of Rs. 25,000

Hence, the duty payable by Mr. Roy shall be –

	Rs.
Personal effects like clothes etc.	NIL
Wine upto 2 ltrs. Can be accommodated in GFA	1,000
Video cassette recorder is dutiable	11,000
A microwave oven	20,000
Total dutiable goods imported (that can be accommodated in GFA)	32,000
Less : General Free Allowance under Rule 3	25,000
Balance goods on which duty is payable	7,000
Customs duty payable @ 36.05%	2,524

Q. 25. The goods manufactured by ABC Ltd., which were liable to duty @ 20.6%, have been exempted therefrom with effect from 1.3.2011. Its inputs are available at a fixed rate and are liable to excise duty @10.30%. On 1.3.2011 –

(i) Inputs (1,000 units) purchased for Rs. 1,10,300 (inclusive of duty) are lying in stock;

(ii) The stock under process (WIP) is 500 units (100% complete as to inputs);

(iii) Finished goods (1,250 units) are lying in stock (input-output ratio is 1:1); and

(iv) The balance in CENVAT receivable a/c. is. Rs. 1,64,800.

The department has demanded reversal of credit taken on inputs referred to above. However, the company contends that credit once validly is indefeasible and cannot be required to be reversed. Decide.

What would be your answer if the balance in CENVAT receivable a/c. as on 1.3.2011 is RS. 20,000.

Answer 25.

It is well-established law that credit once validly taken is indefeasible and cannot be required to be reversed – CCEx v. Dai Ichi Karkaria Ltd. [1999] 112 ELT 353 (SC). But, the same is subject to the specific provisions of the Act or rules made thereunder. If the statutory provisions require reversal of credit in particular circumstances, the credit has to be reversed in accordance therewith.

Accordingly, in view of specific provisions of Rule 11(3) of the CENVAT Credit Rules, 2004, since the final products of ABC Ltd. have been absolutely made exempt from excise duty, therefore, the company shall have to pay an amount eual to CENVAT credit taken on inputs lying in stock or in process or contained in final product lying in stock and balance credit, if any, shall lapse. Accordingly, ABC Ltd., will have to pay amount computer as follows :

	Rs.
Inputs lying in stock (Credit = 1,10,300 x 10.30 ÷ 110.30) (Net purchase price, exclusive of excise duty per unit = 1,00,000 ÷ 1,000 units = Rs. 100 per unit)	10,300
Inputs in process (100 per unit x 500 units x 10.30%)	5,150
Inputs contained in finished goods lying in stock (100 per unit x 1250 units x 10.30%)	12,875
Amount to be paid by ABC Ltd.	28,325

The aforesaid amount can be paid by utilizing the balance in CENVAT Credit A/c. The balance credit 1,64,800 – 28,325 = Rs. Rs. 1,36,475 shall lapse.

If balance in CENVAT receivable is Rs. 20,000 : If the balance in CENVAT receivable a/c. as on 1.3.2011 is Rs. 20,000, then the manufacturer will have to pay in cash an amount = Rs. 28,325 – Rs. 20,000 = Rs. 8,325.

Q. 26. Compute assessable value for Central Excise purposes of Product A whose details are given below. Out of 1,000 units manufacture, 800 units of product A have been cleared to a sister unit for further production of excisable goods on assessee's behalf; the balance 200 units are lying in stock -

	Amount (Rs.)
Direct material consumed (inclusive of excise duty @ 10.30%)	**2,20,600**
Direct labour & direct expenses	**1,80,000**
Works overheads (inclusive of quality control costs of Rs. 25,000 and research & development costs of Rs. 75,000)	**1,60,000**
Administrative overheads (60% related to production)	**1,50,000**
Packing cost of primary as well as secondary packing	**40,000**
Net value of non-excisable inputs received free of cost from sister unit for manufacture of A	**80,000**
Value of moulds, dies etc. received free of cost from sister unit for manufacture of A (25% of the value related to current production)	**2,00,000**
Interest and financial charges	**86,000**
Abnormal losses (not included above)	**14,000**
VRS compensation to labour/ employees (not included above)	**1,00,000**
Selling and distribution costs (including advertisement)	**36,000**
Realizable value of scrap/ wastage	**10,000**

Answer 26.

Calculation of cost of production in terms of Rule 8 of Valuation Rules, 2000 **(Amount in Rs.)**

Direct material consumed (net of excise duty, assuming that CENVAT credit of inputs has been availed [2,20,600 x 100 ÷ 110.30]	2,00,000
Direct labour and direct expenses	1,80,000
Works overheads (depreciation, quality control costs and research & development costs also form part of 'cost'	1,60,000
Administrative overheads (only those relatable to production form part of 'cost')	90,000
Packing cost of primary as well as secondary packing (it forms part of 'cost')	40,000
Inputs received free of cost from sister unit (they also form part of 'cost' for the purpose of Rule 8 as per CAS – 4; as their value is 'cost' of product A	80,000
Amortized cost of moulds, dies etc. received free of cost from sister unit will form part of 'cost' (since 25% related to current year production, hence, 25% of the total value of moulds and dies, etc. is includible in the 'cost')	50,000
Interest and financial charges (do not form part of cost)	Nil
Abnormal losses (do not form part of cost)	Nil
VRS compensation to labour/ employees (they shall also not form part of 'cost', as it is non-recurring cost arising due to unusual or unexpected occurrence of events)	Nil
Selling and distribution costs (do not form part of cost)	Nil
Realizable value of scrap/ wastage (deductible from cost)	– 10,000
Cost of production of 1,000 units (as per CAS – 4)	7,90,000
Cost per unit	790
Add : 10% notional profit margin as per Rule 8	79
Assessable value under Rule 8 (110% of cost of production) (per unit)	869
Assessable value of 800 units cleared to sister unit	6,95,200

Q. 27. (a) Ajay purchases raw materials from Varun and Tarun for manufacturing goods. Ajay sells goods to wholeseller Ram. Ram sells goods to Rahim, a retailer, who sells goods to consumers. Calculate the amount of VAT collected by the government from the following particulars based on the fact that Tarun charges VAT @ 4% and other sellers charge VAT @ 12.5%.

	Price without VAT (Rs.)
Raw material supplied :	
Varun to Ajay	**5,000**
Tarun to Ajay	**8,000**
Manufactured goods sold :	
Ajay to Ram	**18,000**
Ram to Rahim	**25,000**
Rahim to consumers	**30,000**

(b) A, an unit in SEZ, received services as covered u/s 65(105) from various service provider in relation to the authorized operation in the SEZ. At the time of making payment, service provider ask it to pay the service tax, however, it argues that service tax is not liable on taxable services provided to it. Now, you are approached to confirm the contention of A with the following details :

Place where such services consumed	Amount (Net of tax)
(i) Within the SEZ	**Rs. 5,00,000**
(ii) Partially within the SEZ and partially out of the SEZ	**Rs. 3,00,000**
(iii) Wholly out of the SEZ	**Rs. 6,00,000**

Answer 27. (a)

Computation of total amount of VAT collected by the Government :

Particulars	**VAT rate**	**Value without VAT**	**VAT**	**Input tax credit**	**Balance payable**
On Input					
Varun to Ajay	12.5%	5,000	625	–	625
Tarun to Ajay	4%	8,000	320	–	320
On sale of final product					
Sale by Ajay to Ram	12.5%	18,000	2,250	945	1,305
Sale by Ram to Rahim	12.5%	25,000	3,125	2,250	875
Sale by Rahim to consumers	12.5%	30,000	3,750	3,125	625
Total VAT payable to the government					3,750

Answer 27. (b)

Notification No. 9/2009 dated 3.3.2009 as amended by Notification No. 15/2009 dated 20.5.2009 states that if taxable services provided to SEZ units are consumed partially or wholly outside SEZ then exemption is granted by way of refund. Accordingly, A is required to pay service tax on services received in relation to authorized operation which was consumed partially or wholly outside SEZ. Thus, A is required to pay service tax as given below :

Particulars	Working	Tax (in Rs.)
Services consumed within the SEZ	Exempted	Nil
Services consumed partially within the SEZ and partially out of the SEZ	Rs. 3,00,000 * 10%	30,000
Services consumed wholly out of the SEZ	Rs. 6,00,000 * 10%	60,000
Service tax before cess		90,000
Add : Education cess	Rs. 90,000 * 2%	1,800
Add : Secondary higher education cess	Rs. 90,000 * 1%	900
Service tax to be paid to the parties		92,700

However, such service tax shall be claimed as refund by A subject to fulfillment of certain conditions.

Q. 28. (a) The appellant wrongly classified the storage tank, motor rails and platforms manufactured by him under chapter heading 73.09 by taking it to the storage of general use. Later on, he claimed the classification under chapter heading 84.19 on the ground that storage tank concerned, was actively used for manufacturing activity of the plant and was an integral part of the manufacturing process, therefore, ought to be classified under chapter 84.19.

Adjudication Authority disallowed the assessee's claim of CENVAT credit in respect of the input/ capital goods used for the construction of tank by taking the classification of the product under Chapter 73. Its primary contention was that classification once opted by the manufacturer could not be altered subsequently.

(b) Mr. X is a manufacturer of machineries. Selling price of the Machinery is Rs. 1,50,000, which includes the following :

Packing charges	**Rs. 10,000**
Transport from the manufacturer to the buyer's place	**Rs. 15,000**
Excise duty	**@ 10%**
Education Cess	**@ 2%**
Secondary and Higher Education Cess	**@ 1%**

Find the Assessable Value and Excise duty payable.

Answer 28. (a)

The assessee classifying the product under one classification wrongly has the right to rectify the classification later on. The Department cannot stop the change of classification by stating that the classification earlier claimed was erroneous. Therefore, the assessee's contention was justified under the Central Excise Law. With regard to claiming of Cenvat credit the High Court (Rajasthan) said that the Adjudication Authority should first decide the question of proper classification of the product in question and think of eligibility of Cenvat credit. [Guljag Industries Ltd. v. Union of India, Rajasthan HC 2008 (224) ELT 38 (Raj)].

Answer 28. (b)

Selling Price	Rs. 1,50,000
Less : Transport chages	Rs. 15,000
Balance	Rs. 1,35,000
Let assume assessable value be X Assessable value	X
Excise duty @10%	0.10X
Education Cess @2%	0.002X

SAH Cess @1%	0.001X
Balance	1.103X
Assessable value	1,35,000 × 1/1.103
Assessable value	Rs. 1,22,393
Basic Excise Duty @10%	12,239
Education cess @2%	Rs. 245
SAH cess @1%	Rs. 122
Total excise duty	Rs. 12,606

Q. 29. Mr. X an importer imported certain goods CIF value was US $ 20,000 and quantity 1,000 Kgs. Exchange rate was 1 US $ = Rs. 50 on date of presentation of Bill of Entry. Customs Duty rates are—

(i) Basic Customs Duty 10%

(ii) Education Cess 2%

(iii) SAH Education cess 1%

There is no excise duty payable on these goods if manufactured in India. As per Notification issued by the Government of India, anti-dumping duty has been imposed on these goods. The anti-dumping duty will be equal to difference between amount calculated @ US $ 30 per kg and 'landded value' of goods.

Compute Customs Duty liability and anti-dumping liability.

Answer 29.

Part - I	**Rs.**
Total CIF Price US $ 20,000 × Rs. 50	10,00,000
Add : Landing charges @ 1% × 10,00,00	10,000
Assessable Value	10,10,000
Basic duty @ 10%	1,01,000
Sub total	11,11,000
Add : Education cess 2% on 1,01,000	2,020
Add : Secondary and Higher Education Cess [@1% on 1,01,00]	1,010
Value of imported goods	11,14,030

Total Customs Duty payable is Rs. 1,04,030.

Part - II

Rate as per Anti Dumping Notification is Rs. 15,00,000

[US $ 30 per kg × 1,000 Kgs × Rs. 50]

Part - III

Computation of anti-dumping duty

Rate as per Anti Dumping Notification	15,00,000
Less : Value of imported goods as computed above	(11,14,030)
Anti Dumping Duty payable	3,85,970

Q. 30. (a) The assessee imported certain goods and paid countervailing duty (CVD) on them. Credit of such duty was availed of by the assessee on the basis of the invoice evidencing such payment. The consignment of the goods was received directly in the factory but the actual quantity of the imported goods was marginally less than the actual quantity stated in invoice. The Assistant Commissioner contended that the assessee would not be entitled to the credit on the goods received short in the factory.

(b) The goods imported by the importer were destroyed by fire while they were in the custody of the custodian appointed u/s 45(1) of the Customs Act. The importer claimed insurance compensation from insurance company and the insurance company, by doctrine of subrogation, claimed the compensation from the custodian as well as the customs authorities, contending that both were liable to damage.

Whether custodian alone or Customs authorities alone or both are jointly and severally liable to damages?

Answer 30. (a)

If the transit loss is found to be normal loss (in the given case it is ½ %) then the full credit of CVD paid by the assessee in respect of the goods can be availed as Cenvat credit if these goods are used in the manufacture of dutiable final product. [Union of India v. Bhilwara Spinning Ltd. 2008 (222) ELT 362 (Raj)].

Answer 30. (b)

The Customs Act contains provisions enabling temporary storage of goods before clearance for home consumption or for warehousing. The custodian appointed u/s 45 is not an independent authority to deal with imported goods; he is to act as per directions of Proper Officer. Therefore, as per the scheme of the act, the Customs authorities exercise complete control over imported goods in possession of custodian till clearance for home consumption or warehousing or transshipment. The fact that section 45(3) casts duty liability on custodian on pilferage of goods doesn't mean that customs authorities are not answerable to loss of goods, as the imported goods statutorily remain in the custody of the customs authorities and such customs authorities become bailee vis-à-vis importer.

Any arrangement made by Customs Authorities for proper storage of imported goods, by appointing the custodian, would not absolve its liability to account for the loss, if any, of such imported goods even if such goods were in possession of custodian. Further since custodian is statutorily appointed by Customs, hence, even custodian is answerable to the Customs Department for any loss of destruction of such goods.

Hence, Customs Department as well as the custodian are jointly and severally liable for the loss caused to imported goods. However, internal division of liability amongst Customs Department and custodian may be governed by agreement between them.

[Mysore Sales International Ltd. v. United India Insurance Co. Ltd. (2009) 243 ELT 161 (Kar.)]

Question No.30 (c):
Briefly explain the following with reference to the provisions of the Central Excise Act, 1944:
(i) Curing
(ii) Broker or Commission agent

Answer:
(a) (i) As per section 2(c) of the Central Excise Act, 1944, 'curing' includes wilting, drying, fermenting and any process for rendering an unmanufactured product fit for marketing or manufacture.
(ii) As per section 2(aaa) of the Central Excise Act, 1944, broker or commission agent means a person who in the ordinary course of business makes contracts for the sale or purchase of excisable goods for others.

Question No.30(d)

SC Ltd. is a manufacturer of caustic soda, cement etc. It uses LSHS (Low Sulphur Heavy Stock) as fuel for generating electricity which in turn is captively consumed for the manufacture of final products. It has claimed CENVAT credit on LSHS on the reasoning that this is used 'in relation to manufacture of final products' and hence it is an input. However, the department did not allow the credit as LSHS had been used to generate electricity, which is not excisable and hence LSHS could not be considered as input used as fuel. State with reasons whether the action taken by the department is covered by the CENVAT Credit Rules, 2004. You may take help of the decided case law(s), if any.

Answer:

In the present case, LSHS (low sulphur heavy stock) is used as fuel for generation of 'electricity', which in turn is used in relation to manufacture of final products.
As per rule 2(k)(i) of the CENVAT Credit Rules, 2004, goods used for generation of electricity used in or in relation to manufacture of final products or for any other purpose, within the factory of production, are inputs.
Thus, SC Ltd. can claim CENVAT credit on LSHS and hence, the action taken by the department is not covered by the CENVAT Credit Rules, 2004. The Apex Court in the case of CCE v. Solaris Chemtech Ltd. (2007) 214 ELT 481 (SC) has also confirmed that LSHS and furnace oil used for generation of electricity used for manufacture of final
products are inputs eligible for CENVAT credit.

Question No.30(e)

Explain the term 'normal transaction value' under the Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000. How is the term used for valuation of excisable goods?

Answer:
As per rule 2(b) of the Central Excise Valuation (Determination of Price of Excisable Goods) Rules, 2000, 'normal transaction value' means the transaction value at which the greatest aggregate quantity of goods are sold.
The term is used for valuation in case of depot transfer under rule 7, sale to related person under rule 9 and valuation in case of job-work under rule 10A of the said rules. In case of depot transfer

under rule 7, the value of the excisable goods is the normal transaction value of such goods sold from such depot at or about the same time and, where such goods are not sold at or about the same time, at the time nearest to the time of removal of goods under assessment.
In case of sale to related person under rule 9, the value of the excisable goods is the normal transaction value at which these are sold by the related person at the time of removal, to buyers (not being related person); or where such goods are not sold to such buyers, to buyers (being related person), who sells such goods in retail.
Under rule 10A(ii), where the goods are not sold by the principal manufacturer at the time of removal of goods from the factory of the job-worker, but are transferred to some other place, the value of the excisable goods shall be the normal transaction value of such goods sold from such other place at or about the same time and, where such goods are not sold at or about the same time, at the time nearest to the time of removal of said goods from the factory of job-worker.

Question No. 30(f)
A particular product of a manufacturer was exempt from duty. Subsequently, central excise duty was imposed on it. The manufacturer assessee continued to sell the product without any change in selling price. Later, he realised that he had paid higher quantum of duty. He filed a refund claim stating that there was no change in the price before and after imposition of duty and hence, the burden of duty has not been passed on to the buyer. Will his stand for refund claim be acceptable ? Discuss briefly.

Answer:
In CCE v. Allied Photographics 2004 166 ELT 3(SC), it has been held that even if there is no change in price before and after assessment (i.e. before and after imposition of duty), it does not lead to the inevitable conclusion that incidence of duty has not been passed on to the buyer as such uniformity may be due to various factors. Thus, even if the price remains the same before and after imposition of duty, the assessee has to establish that he has not passed on the burden of duty to the buyer. Thus, the refund claim of the manufacturer will not be acceptable.

Question No.30(g)
State in brief the penal provisions under the Central Excise Act, 1944 and rules made thereunder if a manufacturer of excisable goods does not apply for registration.

Answer

As per section 9(1)(a) of the Central Excise Act, 1944, any person who contravenes the provisions of rules regarding registration of a unit (required under section 6 of the Act),shall be punishable with imprisonment upto seven years and fine (without limit) if the duty leviable on the excisable goods exceeds Rs.1,00,000. The imprisonment should be minimum for six months unless there are special and adequate reasons for granting lesser punishment. However, if the duty leviable on goods is less than Rs.1,00,000, imprisonment upto three years or fine or both can be imposed.
Under rule 25 of the Central Excise Rules, 2002, where any manufacturer or producer engages in manufacture, production or storage of any excisable goods without having applied for registration, all such goods shall be liable to confiscation. Moreover, such manufacturer/producer shall also be liable to a penalty not exceeding the duty on such excisable goods or Rs.2,000, whichever is greater.

Question No.30(h)

(i) Briefly explain the provisions of sub rule (5B) of rule 3 of the CENVAT Credit Rules, 2004 regarding the value of input or capital goods, on which CENVAT credit has been taken, iswritten off fully, before being put to use.

(ii) Discuss briefly the provisions of rule 4(4) of the Central Excise Rules, 2002 regarding storage of non-duty paid goods outside the factory.

(iii) Mention any four important types of bonds with their purpose for use under the central excise laws.

(iv) Write a note on publication of information in respect of certain person in certain cases under the Central Excise Act, 1944.

(v) What do you mean by scrutiny of assessment in view of the self- assessment procedure under central excise?

(vi) What are the conditions required to be fulfilled by the importer to make the imported goods eligible for preferential rate of duty prescribed by the Central Government by notification under section 25 of the Customs Act, 1962?

(vii) Explain the term 'joint venture in India' under the explanation to section 28E(c) of the Customs Act, 1962 for the purpose of advance ruling.

(viii) A show cause notice demanding customs duty was issued in case of clearances made by a 100% Export Oriented Undertaking (EOU) to Domestic Tariff Area (DTA). Is the show cause notice defective in law?

(ix) What do you mean by assessment of goods under the Customs Act, 1962?

Answer:

(i) Sub-rule (5B) of rule 3 of the CENVAT Credit Rules, 2004 provides that if the value of any,
(a) input, or
(b) capital goods before being put to use,
on which CENVAT credit has been taken is written off fully or where any provision to write off fully has been made in the books of account, then the manufacturer shall pay an amount equivalent to the CENVAT credit taken in respect of the said input or capital goods. However, if the said input or capital goods is subsequently used in the manufacture of final products, the manufacturer shall be entitled to take the credit of the amount equivalent to the CENVAT credit paid earlier subject to the other provisions of these rules.

(ii) As per rule 4(4) of the Central Excise Rules, 2002, the storage of non-duty paid goods outside the factory can be permitted by the Commissioner of Central Excise subject to such safeguards as he may specify. Such storage outside the factory premises is permissible in exceptional circumstances having regard to the nature of the goods and
shortage of storage space in the factory.

(iii) Bond is a collateral security and its purpose is to secure compliance with the rules and procedures laid down under the excise law. The types and purpose of the bonds are given below.

Types of bond:

B -1 Surety/Security Export of goods without payment of duty (Rule 19)
B - 2 Surety/Security Provisional Assessment
B - 3 Despatch of excisable goods removed for rewarehousing and export therefrom without payment of duty
B - 11 Provisional release of seized goods

B – 17 Surety/Security Composite bond of 100% EOUs/EPZ for assessment, export, accounting and disposal
of excisable goods obtained free of duty

Note: Any four types of bonds can be given in the answer.

(iv) Section 37E of the Central Excise Act, 1944 provides that the Central Government may publish the name and other particulars of any person relating to any proceeding under the central excise law, in such manner as it thinks fit, if in its opinion it is in public interest to do so. However, the publication in relation to any penalty can be made only after the time for presenting an appeal to the Commissioner (Appeals) or the Appellate Tribunal expires without an appeal being presented or the appeal, if presented, gets disposed of.
In case of a firm, company or other association of persons, the name (s) of partners of the firm, directors, managing agents, secretaries and treasurers or mangers of the company, or the members of the association may also be published if circumstances justify such publication.

(v) In view of the self-assessment procedure wherein the assessee himself assesses the duty liability, the Departmental officers have been entrusted with the responsibility of scrutinizing the assessment for verification of its correctness.
For this purpose, the proper officer may on the basis of information contained in the return filed by the assessee and after such further enquiry as he may consider necessary, scrutinize the correctness of the duty assessed by the assessee on the goods removed, in the manner to be prescribed by the Board [Rule 12(3)]. Sub-rule 4 of rule 12 casts a responsibility on every assessee to make available to the proper officer all the documents and records for verification as and when required by such officer.

(vi) The Government may by notification under section 25 of the Customs Act, 1962 prescribe preferential rate of duty in respect of imports from certain preferential areas.
The importer will have to fulfill the following conditions to make the imported goods eligible for preferential rate of duty:
(a) At the time of importation, he should make a specific claim for the preferential rate.
(b) He should also claim that the goods are produced or manufactured in such preferential area.
(c) The area should be notified under section 4(3) of the Customs Tariff Act, 1975 to be a preferential area.
(d) The origin of the goods shall be determined in accordance with the rules made under section 4(2) of the Customs Tariff Act, 1975.

(vii) As per section 28E (c) of the Customs Act, 1962 which defines an applicant eligible for advance ruling, a joint venture in India is an eligible applicant. The concept of joint venture in India has been explained in a new explanation inserted in the definition of the applicant.
The explanation clarifies that joint venture in India means a contractual arrangement whereby two or more person undertake an economic activity which is subject to joint control and one or more of the partners or participants or equity holders is a non resident having substantial interest in such arrangement.

(viii) Yes, the show cause notice issued is defective in law as in respect of clearances made by a 100% export oriented undertaking (EOU) to domestic tariff area, the duty to be paid by the 100%

EOU is the duty of excise and not customs duty. Therefore, show cause notice using the word 'customs duty' instead of 'central excise duty' is not maintainable. Similar view was expressed in the case of CCE v. Suresh Synthetics (2007) 216 ELT 662 (SC).

(ix) The provisions regarding assessment of goods are contained in section 17 of the Customs Act. After the bill of entry is filed, it is assessed by the appraisers of the customs department. There are two systems of assessment:
(i) First appraisement system or first check procedure: In this type of assessment, goods are examined first and then assessed [Section 17(2)].
(ii) Second system of assessment or second check procedure: In this type of assessment, goods are assessed first and then examined [Section 17(4)].

PAPER 14

Part B

DIRECT TAX MANAGEMENT

Question No.1

(a)Define RESULTING COMPANY [Sec. 2(41A)]

Answer:

Resulting Company means one or more companies (including a wholly owned subsidiary thereof) to which the undertaking of the demerged company is transferred in a demerger and, the resulting company in consideration of such transfer of undertaking, issues shares to the shareholders of the demerged company and includes any authority or body or local authority or public sector company or a company established, constituted or formed as a result of demerger.

(b) Explain the concept of "Application of Income" and "Diversion of Income".

Answer:

Application of Income

An obligation to apply income, which has accrued or has arisen or has been received amounts to merely the apportionment of income. Therefore the essentials of the concept of application of income under the provisions of the Income Tax Act are :

1. Income accrues to the assessee
2. Income reaches the assessee
3. Income is applied to discharge an obligation, whether self-imposed or gratuitous.

Diversion of Income

An obligation to apply the income in a particular way before it is received by the assessee or before it has arisen or accrued to the assessee results in diversion of income. The source is charged with an overriding title, which diverts the income. Therefore the essentials are the following:

1. Income is diverted at source,
2. There is an overriding charge or title for such diversion, and
3. The charge / obligation is on the source of income and not on the receiver.

Examples of diversion by overriding title are -

(a) Right of maintenance of dependants or of coparceners on partition
(b) Right under a statutory provision
(c) A charge created by a decree of a Court of law.

Question No. 2(a)

X, is employed at Delhi as Finance Manager of R Ltd. The particulars of his salary for the previous year 2010-11 are as under: Basic Salary ₹ 16,000 p.m.. Dearness allowance ₹ 12,000 p.m. Conveyance Allowance for personal purpose ₹ 2,000p.m.; Commission @2% of the turnover achieved which was ₹ 9,00,000 during the previous year and the same was evenly spread. HRA ₹ 6,000 pm. The actual rent paid by him ₹ 5,000 pm for an accommodation at till 31.12.10. From 1.1.11 the rent was increased to ₹ 7,000 pm. Compute taxable HRA.

Note : If there is an increase in rent paid, it is advisable to calculate the exemptions separately based on the time period. Rent before and after increase.

Solution :

Salary for HRA (for 9 months) = Basic Pay + DA(considered for retirement benefits) + Commission (if received as a fixed percentage on turnover as per terms of employment)

= (16,000 × 9) + (12,000 × 9) + (2% of 9,00,000 × 9/12) = 2,65,500

Taxable HRA: (April to December 2010). Total time= 9 months

Particulars	₹	₹
Amount received during the financial year for HRA		**54,000**
Less: Exemption u/s 10(13A) Rule 2A.		
Least of the followings:		
(a) Actual amount received	**54,000**	
(b) 50% of Salary	**1,32,750**	
(c) Rent paid less 10% of Salary	**18,450**	**18,450**
[5,000 × 9 – 10% of 2,65,500]		
Taxable HRA		**35,550**

Salary for HRA (for 3 months) = Basic Pay + DA (considered for retirement benefits) + Commission (if received as a fixed percentage on turnover as per terms of employment)

= (16,000 × 3) + (12,000 × 3) + (2% of 9,00,000 × 3/12) = 88,500

Taxable HRA :

Particulars	₹	₹
Amount received during the financial year for HRA		**18,000**
Less: Exemption u/s 10(13A) Rule 2A		
Least of the followings:		
(a) Actual amount received	**18,000**	
(b) 50% of Salary	**44,250**	
(c) Rent paid less 10% of Salary		
[7,000 × 3 – 10% of 88,500]	**12,150**	**12,150**
Taxable HRA		**5,850**

Question No. 2(b)

Mr. Hari retires on 15th October 2010, after serving 30 years and 7 months. He gets ₹ 4,80,000 as gratuity. His salary details are given below:

FY 2010-11	Salary ₹ 16,000 pm	D.A. 50% of salary. 40% forms part of retirement benefits.
FY 2009-10	Salary ₹ 15,000 pm	D.A. 50% of salary. 40% forms part of retirement benefits

Determine his gross salary in the following cases:

(i) He retires from government service

(ii) He retires from seasonal factory in a private sector, covered under Payment of Gratuity Act, 1972.

(iii) He retires from non-seasonal factory, covered by Payment of Gratuity Act, 1972

(iv) He retires from private sector, not covered by payment of Gratuity Act

Solution :

(i) The amount of gratuity received as a Government employee is fully exempt from tax u/s 10(10)(i)

(ii) As an employee of a seasonal factory, in a private sector, covered under the Payment of Gratuity Act, 1972

Computation of Taxable Gratuity

Particulars	₹	₹
Amount received as Gratuity		**4,80,000**
Less: Exemption u/s 10(10)(ii)		
Least of the followings:		
(i) Actual amount received	**4,80,000**	
(ii) 7/26 x Last drawn salary × No. of years of completed service or part thereof in excess of 6 months [31 × 7/26 × 24,000]	**2,00,308**	
(iii) Maximum Limit	**10,00,000**	**2,00,308**
Taxable Gratuity		**2,79,692**

(iii) As an employee of a non-seasonal factory, covered by Payment of Gratuity Act, 1972

Computation of Taxable Gratuity

Particulars	₹	₹
Amount received as Gratuity		**4,80,000**
Less: Exemption u/s 10(10)(ii)		
Least of the followings:		
(i) Actual amount received	**4,80,000**	
(ii) 15/26 × Last drawn salary × No. of years of completed service or part thereof in excess of 6 months [15/26 × 31 × 24,000]	**4,29,231**	
(iii) Maximum Limit	**10,00,000**	**4,80,000**
Taxable Gratuity		**NIL**

Note : Salary = Basic Pay + Dearness Allowance

In case of seasonal employment, instead of 15 days, 7 days shall be considered.

(iv) As an employee of a private sector, not covered by Payment of Gratuity Act, 1972

Computation of Taxable Gratuity

Particulars	₹	₹
Amount received as Gratuity		4,80,000
Less: Exemption u/s 10(10)(iii) Least of the followings:		
(i) Actual amount received	4,80,000	
(ii) 1/2 × Average salary × No. of fully completed years of service [½ × 18,720 × 30]	**2,80,800**	
(iii) Maximum Limit	**10,00,000**	**2,80,800**
Taxable Gratuity		**1,99,200**

Note: Salary = 10 months average salary preceeding the month of retirement.
= Basic Pay + Dearness Allowance considered for retirement benefits + commission (if received as a fixed percentage on turnover)

Salary for the months December'09 till September '10 shall have to be considered.

Basic Salary:	₹
December '09 to March '10 = 15,000 × 4	= 60,000
April '10 to September '10 = 16,000 × 6	= 96,000
Total Basic Salary	1,56,000
Add: D.A. [50% of 1,56,000 × 40%, forming part of superannuation benefits]	31,200
Salary for 10 months	1,87,200

Therefore, **Average salary for 10 months = 1,87,200/10 = 18,720**

Question No.3(a):

Mr.Ritesh is provided with an accommodation in Kolkata since April 2010. Salary ₹ 40,000 p.m. Cost of furniture provided ₹ 80,000. On 1st September, 2010, following a promotion with a increase in Salary by ₹15,000, he was transferred to Jharkhand (population less than 25 lakhs but more than 10 lakhs), and was also provided an accommodation there. Mr.Ritesh was allowed to retain the Kolkata accommodation till March, 2011. Compute taxability.

Solution :

Phase 1: Value of Furnished Accommodation (Kolkata) (April to September 2010)

Particulars	**₹**
Value of unfurnished accommodation (15% of 40,000 × 6 months)	**36,000**
Add: Value of Furniture provided:	
• 10%p.a. of original cost of such furniture (10% of 80,000 x 6 months)	**8,000**
Value of Furnished Accommodation	**44,000**

Phase 2: Valuation of accommodation (October 2010 to December 2010)

(a) For the first 90 days of transfer: Where accommodation is provided both at existing place of work and in new place, the accommodation, which has lower value, shall be taxable.

(b) After 90 days: Both accommodations shall be taxable.

Computation for the first 90 days of transfer: (October 2010 to December 2010)

Lower of :

(i) Value of accommodation at existing place of work

(ii) Value of accommodation at new place

Value of accommodation at existing place of work (Kolkata)	
15% of salary for 3 months (i.e. 90 days) = 15% of 55,000 × 3 months	= 24,750
Add: Cost of furniture provided: 10% of 80,000 x 3 months	= 24,000
Total Value of Perquisite	48,750

Question No. 3(b)

A was employed with Z Ltd. He retired w.e.f. 1.2.2011 after completing a service of 24 years and 5 months. He submits the following information:

Basic Salary	₹ 5,000 per month (at the time of retirement)
Dearness Allowance	100% of Basic Salary (60% of which forms part of salary for retirement benefits).
Last increment	₹ 500 w.e.f. 1.7.2010

His pension was determined at ₹ 3,000 per month. He got 50% of the pension commuted w.e.f. 1.3.2011 and received a sum of ₹ 1,20,000 as commuted pension. In addition to this, he received a gratuity of ₹ 1,50,000 and leave encashment amounting to ₹ 56,000 on account of accumulated leave of 240 days. He was entitled to 40 days leave for every year of completed service.

Compute his Gross Salary for assessment year 2011-12 assuming that he is not covered under Payment of Gratuity Act.

Solution:

Computation of Gross Salary for the Assessment Year 2011-12

			₹	₹
Basic Pay: April '10 to June '10 = 3 months @ ₹ 4,500 pm			13,500	
July 10 to June '11 = 7 months @ ₹ 5,000 pm			35,000	48,500
Dearness Allowance @ 100% of Basic Pay				48,500
Uncommuted Pension				
February @ ₹ 3,000 pm			3,000	
March @ ₹ 1,500 pm			1,500	4,500
(Since 50% commuted)				
Commuted Value of Pension				
Amount Received			1,20,000	
Less : Exemption u/s 10(10A)				
1/3 of Value of Commuted Pension			80,000	40,000
Full value of Commuted Pension				
= (1,20,000 / 50%) = 2,40,000				
Gratuity:				
Amount received			1,50,000	
Less : Exempt (*See* note No. 1)			93,120	56,880
Least of the followings:				
(i) Actual Amount Received		1,50,000		
(ii) Maximum limit		10,00,000		
(ii) 1/2 months average salary		93,120		
for each years of completed service (½ x 7,760 x 24)				

Salary for Gratuity (not covered by Payment of Gratuity Act)

= Basic Pay + D/A (Forming part for retirement benefit)

Average Salary = (Total Salary of 10 months preceeding the month of retirement)/10

= (48,500 + 50% 0f 48,500) /10 = (48,500 + 29.100)/10 =7,760

Leave Encashment				
Amount received			56,000	
Less : Exemption u/s 10(10AA)				
Least of the followings:				
(i) Actual Average Salary	56,000			
(ii) 10 months average salary (10×7760)	77,600			
(iii) Maximum limit	3,00,000			
(iv) Leave Credit as per Note	NIL		NIL	56,000

Notes :

Calculation of Leave Credit

	Total leave entitlement (24 yrs × 40 days p.a.	= 960 days
Less :	Leave Availed during service	720 days
	= Total leave entitlement – Leave encashment	
	= (960 – 240)	240 days
Less :	Excess Leave in excess of 30 days p.a. [24 (40 – 30)]	240 days
	Leave credit	**NIL**

Question No.4(a)

Hema, aged about 66 years is a Finance Manager of Udyog Pvt. Ltd. based at Mumbai. She is in continuous service since 1969 and received the following from the Company during the year ending 31.3.2011.

(a) Basic Pay (50,000 × 12) = ₹ 6,00,000
(b) D.A (20,000 × 12) = ₹ 2,40,000
(c) Bonus 2 months Basic Pay
(d) Commission — 0.1% of Company's Turnover. Turnover for financial year 2010-2011 was ₹ 15 crores.
(e) Contribution of the Employer and Employee to the PF Account ₹ 3,00,000 each
(f) Interest credited to P.F Account at 10% ₹ 60,000
(g) Rent Free Unfurnished Accommodation provided by the Company (Company pays ₹ 70,000 p.a. rent)
(h) Entertainment Allowance ₹ 30,000
(i) Children's Education Allowance to meet the hostel expenditure of three children ₹ 5,000 each.

Hema makes the following payments and Investments :

(a) Premium paid to insure the life of her major son ₹ 15,000
(b) Medical Insurance Premium for Self — ₹ 15,000, Spouse ₹ 15,000 (Aged 70 years)
(c) Donation to Public Charitable Institution registered under Section 80G ₹ 2,00,000
(d) LIC Pension Fund ₹ 12,000
(e) Long-term Infrastructure Bond —₹ 25,000

Determine the tax liability for the Assessment Year 2011-12.

Assessee : Mr. Lakshmi **Previous Year: 2010-2011** **Assessment Year : 2011-12**

Computation of Total Income

Particulars		**₹**	**₹**
Basic Salary	(₹ 50,000×12)		6,00,000
Dearness Allowance	(₹ 20,000×12)		2,40,000
Bonus	(₹ 50,000×2)		1,00,000
Commission	(₹ 15 Crores×0.1%)		1,50,000
Employer's Contribution to Provident Fund		3,00,000	
Less : Exemption u/s 10(14) upto 12% of Salary (12% × 9,90,000) **(WN 1)**		(1,18,800)	1,81,200
Interest credited to Provident Fund Account at 10%		60,000	
Less : Exempted u/s 10(14) upto 9.5%		57,000	3,000
Entertainment Allowances			30,000
Children Education Allowance (₹ 5,000×3)		15,000	
Less : Exempt u/s 10(14) [₹ 300 p.m.×12 months × 2 Children (maximum)]		(7,200)	7,800
Taxable Salary before Perquisites			**13,12,000**
Value of Perquisites			
Rent Free Unfurnished Accommodation			
Least of the following—			
Rent paid by the Employer 70,000			
15% of Salary [15% of ₹ 11,27,800] **(WN 2)** (assumed that Mumbai population > 25 Lakhs as per latest census)		1,69,170	70,000
Gross Salary			**13,82,000**
Less : Deduction u/s 16			
Entertainment Allowance u/s 16(ii) [Not a Govt. Employee]			Nil
Income under the head Salary			**13,82,000**

Gross Total Income					**13,82,000**
Less :	Deduction Under Chapter VI-A				
	U/s 80C	LIC Premium paid	15,000		
		Contribution to PF Account	3,00,000		
	U/s 80CCC	Contribution to Pension Fund	12,000		
		[The maximum amount along with deduction u/s 80CCC and 80CCC or u/s 80C, restricted to ₹ 1,00,000]	1,00,000		
	U/s 80CCF	Subscription to long term Infrastructure Bond	20,000		
	U/s 80D	Medical Insurance Premium paid		20,000	
	U/s 80G	**(WN 3)**		63,450	**(2,03,450)**
	Total Income				**11,78,550**

Computation of Tax Liability

Particulars		₹	₹
Total Income			**11,78,550**
Upto ₹ 1,90,000			NIL
1,90,000 – 5,00,000	= @ 10% of 3,10,000		31,000
5,00,000 – 8,00,000	= @ 20% of 3,00,000		60,000
8,00,000 – 11,78,550	= @ 30% of 3,78,550		1,13,565
			2,04,565
(+) Deduction Cess @ 2%			4,091
(+) SHEC @ 1%			2,046
			2,10,702
Rounded off u/s 288A			**2,10,700**

Working Notes :

1. Salary for the purpose of computation of Taxable Portion of Employer's Contribution to Provident Fund
   = Basic Salary + DA considered for Retirement Benefits + Commission
   = ₹ 6,00,000 + ₹ 2,40,000 + ₹ 1,50,000 = ₹ 9,90,000
2. Salary for the purpose of computation of Taxable Value of Rent Free Unfurnished Accommodation
   = Basic Pay (+) D.A (forming part of Salary) (+) All other Taxable Allowances (+) Any other monetary benefits
   = 6,00,000 + 2,40,000 + 1,00,000 + 1,50,000 + 30,000 + 7,870 = 11,27,800
3. **Computation of deduction u/s 80G:**

50% of least of the followings:		₹
(a) Amount Donated		2,00,000
(b) 10% of Adjusted Gross Total Income		
Gross Total Income	13,82,000	
Less : Deduction under Chapter VI-A excluding sec. 80G		
u/s 80C		
80CCC	1,10,000	
(retired u/s 80CCF)		
u/s 80CCF	20,000	
u/s 80D	20,000	

Question No.4(b)

Mr. L is the owner of a commercial property let out at ₹ 30,000 p.m. The municipal tax on the property is ₹ 15,000 annually, 60% of which is payable by the tenant. This tax was actually paid on 15.4.2011. He had borrowed a sum of ₹ 10 Lakhs from his cousin, resident in USA (in dollars) for the construction of the property on which interest at 18% is payable. He has also received arrears of rent of ₹ 40,000 during the year, which was not charged to tax in the earlier years. What is the Property Income of X for A.Y. 2011-12?

Solution :

Assessee : Mr. L | **Previous Year : 2010-2011** | **Assessment Year : 2011-12**

Computation of Income from House Property

	Particulars		**₹**	**₹**
	Let Out : So, Annual Value u/s 23(1)(a)/(b) = Actual Rent = ₹ 30,000×12		3,60,000	
Less :	Municipal Taxes Paid during the F.Y. 2010-11			NIL
	Net Annual Value			**3,60,000**
Less :	**Deduction u/s 24**			
	– 30% of NAV –	₹ 3,60,000 × 30%	1,08,000	
	– Interest on Housing Loan (Note)	₹ 20,00,000 × 8%	1,60,000	(2,68,000)
	Income from House Property before considering Arrears of Rent			**92,000**
	Arrears of Rent Received		40,000	
Less :	Deduction u/s 25B – 30% of Arrears received – ₹ 40,000 × 30%		(12,000)	28,000
	Net Income from House Property			**64,000**

Note : It is presumed that the tax has been deducted at source on the amount of interest payable outside India.

Question No. 5(a)

Mr. G and N constructed their houses on a piece of land purchased by them at Kolkata. The built-up area of each house was 1,000 sq ft. Ground floor and an equal area in the First floor. Mr. G started construction on 1.7.2009. Mr. G occupied the entire house on 1.4.2010. Mr. N occupied the Ground floor on 1.7.2010 and let-out the first floor for a rent of ₹ 20,000 p.m. However, the tenant vacated the house on 31.12.2010 and Mr. N occupied entire house during 1.1.2011 to 31.3.2011.

Following are the other information:

(i)	Fair Rental Value of each unit (Ground floor/First floor)	₹ 2,00,000 p.a.
(ii)	Municipal Value of each unit (Ground floor/First floor)	₹ 90,000 p.a.
(iii)	Municipal taxes paid by	G – ₹ 12,000
		N – ₹ 12,000
(iv)	Repairs and Maintenance charges paid by	G – ₹ 40,000
		N – ₹ 50,000

Mr. G has availed a housing loan of ₹ 16.00 Lakhs @ 12% p.a. on 1.4.2009. N has availed a housing loan of ₹ 18.00 Lakhs @ 10% p.a. on 1.7.2009. No repayment was made by either of them till 31.3.2011. Compute Income from House Property for G and N for the A.Y. 2011-12.

Solution:

Assessee: Mr. G | **Previous Year: 2010-2011** | **Assessment Year: 2011-12**

Computation of Income from House Property

	Particulars	**₹**
	Nature : Self Occupied – Annual Value u/s 23(2)	NIL
Less :	**Deduction u/s 24 :** Interest – ₹ 16 Lakhs × 12% = ₹ 1,92,000 (Restricted to ₹ 1,50,000)	1,50,000

Loss from House Property				**(1,50,000)**

Note : Since construction of property is completed in the year of borrowal of loan itself, prior period interest does not arise.

Assessee : Mr. N **Previous Year : 2010-2011** **Assessment Year : 2011-12**

Computation of Income from House Property

	Particulars	**₹**	**₹**	**₹**
Ground Floor	**Nature : Self Occupied**		NIL	
	Annual Value u/s 23(2)			
Less :	**Deduction u/s 24 :** Interest on Borrowed Capital			
	Current Year : ₹ 18,00,000 × 10% × 50%	90,000		
	Prior Period : ₹ 18,00,000 × 10% × 9/12 × 50% ×1/5	13,500	(1,03,500)	(1,03,500)
First Floor	**Nature : Let-Out**			
	Annual Value u/s 23(1)(a)/(b)			
	Higher of Fair Rent vs. Municipal Rent **[See Note 1]**	1,50,000		
	Higher of Rent selected above vs. Acual Rent received **[See Note 2]**	1,80,000	1,80,000	
Less :	Municipal Taxes – (₹ 12,000 × 50%)		(6,000)	
	Net Annual Value		**1,74,000**	
Less :	Deduction u/s 24			
	(a) 30% of Net Annual Value	52,200		
	(b) Interest on borrowed Capital			
	Current Period Interest – (₹ 18,00,000 × 10% × 50%)	90,000		
	Prior Period Interest – (₹ 18,00,000×10% ×9/12×50% ×1/5)	13,500	(1,55,700)	18,300
	Net Income from House Property			**(85,200)**

Note :

1. Since the construction of property was completed on 1.7.2009, Fair rent, Municipal Rent and Actual Rent receivable are to be considered only for a period of **9 months**.

   Fair Rent = = 1,50,000
   Municipal Value = = 67,500

2. Since the house is self occupied for part of the year and let out for part of the year, income from house property shall be calculated for the whole year as deemed let out property. Therefore Rent receivable is ₹ 1,80,000 (₹ 20,000 × 9).

Question No. 5(b)

The WDV of plant and machinery on 1.4.2010 of Z Ltd. engaged in manufacturing of PVC granules is ₹ 2000 lacs. Company purchased additional plant and machinery for ₹ 1,600 lacs on 18.4.2010 inclusive of second-hand machine imported from Ireland of ₹ 400 lacs to increase its installed capacity of production from 1000 TPA to 1500 TPA. The production from new machine commenced w.e.f 1.12.2010. Work out by giving reasons the amount of allowable depreciation.

Assessee : Z Ltd. **Previous Year : 2010-11** **Assessment Year : 2011-12**

Computation of Depreciation

Particulars		**Lakhs**	
		₹	**₹**
	Opening WDV		2,000
Add :	Additions During the year		1,600
	Net Value for the purpose of Depreciation		3,600
Less :	**Depreciation of the Year**		
—	On Opening Block – ₹ 2,000 Lakhs × 15%	300	

—	On Additions (Period of usage less than 180 days) — ₹ 1,600 lakhs × 15% × 50%	120	
—	Additional Depreciation on Eligible Assets (Notes)	120	540
	Closing WDV		**3,060**

Notes:

1. Second hand machinery imported from China is not an eligible asset for the purpose of Additional Depreciation computation. Therefore, cost of eligible assets = ₹ 1,600 lakhs – ₹ 400 lakhs = ₹ 1,200 lakhs.
2. Period of usage of new machine is less than 180 days. Therefore, they are entitled to only 50% of additional depreciation rate of 20%.

Question No. 5(c)

W.D.V. of Machinery (Rate of Depreciation @15%) = ₹ 5,00,000

New Machinery Purchased (on 31.12.10) = ₹ 1,00,000, having same rate of depreciation.

Calculate Depreciation u/s 32

Block A : Machinery

(Rate of Depreciation = 15%)

W.D.V. of the Machinery		5,00,000
Add :	Cost of New Asset Purchased (relating to the Block) [Put to Use > 180 Days]	Nil
Less :	Government Subsidy Received for Purchase/Acquisition Asset	Nil
Less :	Adjustment for CENVAT Credit	Nil
Less :	Sale of Asset from the Block	Nil
	W.D.V for Charging Depreciation	5,00,000
Less :	Depreciation @ 15%	75,000
	Closing WDV	**4,25,000**

Block B : Machinery

(Rate of Depreciation = 7.5% of 15%, since Acquired & Put to Use for less than 180 Days)

	Cost	1,00,000
Less :	Depreciation @ 7.5%	7,500
	Closing WDV	**92,500**

Total Depreciation u/s 32	= 75,000
	7,500
	82,500

Question No. 5(d)

Kalpataru power Projects is a power generating unit. On 1.4.2008, it purchased a plant of ₹ 50,00,000, eligible for depreciation @15% on SLM. Compute balancing charge or terminal deprecation assuming the plant is sold on 21.4.2010 for : (a) ₹ 8,50,000 (b) ₹ 32,00,000 (c) ₹ 45,00,000 (d) ₹ 52,00,000

Solution :

Computation of Terminal Depreciation or Balancing Charge, Capital Gains.

Particulars	A	B	C	D
W.D.V. as on 1.4.2010	35,00,000	35,00,000	35,00,000	35,00,000
Less: Sale Proceeds	8,50,000	32,00,000	45,00,000	52,00,000
Balance	26,50,000	30,00,000	(10,00,000)	(17,00,000)
Terminal depreciation	26,50,000	3,00,000	NIL	NIL
Balancing charge	NIL	NIL	10,00,000	15,00,000
Short term capital Gain	NIL	NIL	NIL	2,00,000
Computation of Depreciation:				
Original cost	50,00,000			
Less: Depreciation	7,50,000			
WDV as on 1.4.2009	42,50,000			
Less: Depreciation for the year 2009-2010	7,50,000			
WDV as on 1.4.2010	35,00,000			

Question No.5 (e)

Z Ltd. purchased machinery (rate of depreciation 15%) from Japan for US$ 2,50,000 on 17. 08.2009 (US $ = 43.25) by borrowing from Hero Bank Ltd. Z Ltd. took a forward contract on 11.07.2009, when the exchange rate was ₹ 45.70 per US$. This was put to use from 23.11.2009. Compute Depreciation for the previous years 2009-10 and 2010-11.

Assessee: Z Ltd

Previous Year: 2009-10 & 2010-11

Computation of Depreciation and Written Down Value

Particulars	Amount (₹)
Cost of the Asset (US$ 2,50,000 × ₹ 43.25)	1,08,12,500
Less : Depreciation @ 50% of 15% (since Put to Use < 180 days) for previous year 2009-10 (₹ 1,08,12,500 × 50% × 15%)	(8,10,938)
WDV as on 01.04.2010	1,00,01,562
Add : Exchange Rate Difference [US$ 2,50,000 × ₹ (45.70 – 43.25)]	6,12,500
WDV for claiming depreciation	1,06,14,062
Less : Depreciation @ 15% for the previous year 2010-11 (₹ 1,06,14,062 × 15%)	15,92,109
WDV as on 01.04.2011	90,21,953

Question No. 5(f)

Pharma Ltd. imported machinery from Germany on 27.8.10 at a cost of ₹ 40 crores. Customs Duty paid @ 20%. Government granted subsidy of ₹ 25 crores. The entire logisitics was supported by Nexgen Courier Ltd., an Indian Company. Total Service charges paid to them ₹20 lacs including service tax of ₹ 2,20,000.

Compute Actual Cost, if assessee, avail CENVAT credit adjustment.

Assessee : Pharma Ltd **Previous Year : 2010-11**

Computation of Depreciation and Written Down Value

Particulars	Amount (₹ crores)
Cost of Purchase	40.00
Add: Customs Duty @ 20% on ₹ 40 crores	8.00

Less: Government subsidy granted	25.00
Less: CENVAT Credit (Service Tax paid included in the payment made to Nexgen Courier Ltd.)	0.22
Actual Cost for the purpose of charging depreciation	**22.78**

Question No. 5(g)

ZED Ltd. imported machinery from South Korea on 12.5.2010 for US$ 50,000. Exchange rate on that date : US$ = ₹ 44. 70. Customs Duty paid @ 20%. Government granted subsidy of ₹ 15,00,000. The assessee had a forward contract on 2.4.2010 at US$ 45.30. Logistics services was provided by Carrywell Courier Ltd. Service Charges paid ₹ 2,00,000 including service tax of ₹ 25,000. Engineers and labourers were engaged at site for installation of the machinery. Salary and wages paid for site engineers and labourers including their travelling expenses amounted to ₹ 4,60,000. Expenses incurred during trial run period ₹ 1,50,000. Sale of output produced during trial run period ₹ 90,000. Interest earned on deposits made to open Letter of Credit for purchase of this machinery ₹ 15,000 . The machine was put to use from 05.10.10. Depreciation @ 15%. Compute Actual Cost and Written Down Value.

Assessee: ZED Ltd. **Previous Year: 2010-11**

Computation of Actual Cost and Written Down Value

Particulars	**Amount** (₹ crores)
Cost of the Asset (US$ 50,000 × ₹ 44.70)	22,35,000
Add : Customs Duty paid @ 20% on ₹ 22,35,000	4,47,000
Less : Government Subsidy granted	(15,00,000)
Add : Exchange Rate Difference [US$ 50,000 × ₹ (45.30 - 44.70)]	30,000
Add : Transportation charges paid ₹ 2,00,000 (including Service Tax ₹ 25,000)	2,00,000
Less : CENVAT credit adjustment (credit for Service tax included in service charges paid to Carrywell Courier Ltd.)	(25,000)
Add : Installation expenses incurred for payment of site engineers & labourers including travelling expenses	4,60,000
Add : Expenses incurred during trial run period	1,50,000
Less : Sale of output generated during trial run period	(90,000)
Less : Interest earned on deposits made to open Letter of Credit for purchase of this machinery	(15,000)
Actual Cost for the purpose of determining depreciation	**18,92,000**
Less : Depreciation @ 50% of 15% (since Put to Use < 180 days) for previous year 2010-11 (₹ 18,92,000 × 50% x 15%)	1,41,900
WDV as on 01.04.2011	**17,50,100**

Question No. 5(h)

A Bros., a sole-proprietorship concern, was converted into a A Ltd. on 20.9.2010. Before the conversion, the concern had a block of furniture (rate of depreciation @ 10%), whose WDV as on 01.04.2010 was ₹ 6,50,000. On 01.05.2010, a new furniture of the same block was purchased for ₹ 50,000. A Ltd. purchased another furniture of the same type on 20.12.2010 for ₹ 48,000. Compute depreciation that would be claimed by A Bros. and A Ltd for the previous year 2010-11.

Solution :

(1) Depreciation shall have to be calculated at the prescribed rates, as is applicable for a going concern, without considering the event of amalgamation or demerger.

(2) Depreciation shall have to be apportioned between the predecessor and the successor in the ratio of number of days for which such assets were held for their business purpose and used by them.

Depreciation to be apportioned = [W.D.V. as on 1.4.2010 + New Purchases on 01.05.2010]

= ₹ (6,50,000 + 50,000) = ₹ 7,00,000 × 10% = ₹ 70,000

Apportionment of Depreciation and Allowable Depreciation

Assessee	No. of Days	Depreciation on Assets on the date of succession	Depreciation on Assets acquired after Succession	Total Depreciation for the Previous Year 2010-11
A Bros. (Sole-Proprietorship concern)	01.04.2010 to 30.9.2010 = 173 days	₹ 70,000 × 173/365 = ₹ 33,178	Nil	₹ 33,178
A Ltd. (Company)	21.09.2010 to 31.3.2011	₹ 70,000 × 192 × 365 ₹ 36,822	₹ 48,000 × 50% × 10% = ₹ 2,400 (Put to use < 180 days)	₹ 39,222

Question No.5(i)

P Ltd. was taken over by Q Ltd. with effect from 31.7.2010. This satisfies the conditions of Sec. 2(1B) of the Income Tax Act, 1961. From the following information, compute deductions admissible u/s 32 to P Ltd and Q Ltd. for the previous year 2010-11.

Assets	Rate of Depreciation	WDV in the hands of P Ltd (as on 01.04.2010)	Transfer Value to Q Ltd. (₹)
Building	10%	30,00,000	45,00,000
Plant & Machinery	15%	20,00,000	15,00,000
Motor Car	15%	8,00,000	6,00,000
Computers	60%	5,00,000	2,00,000
Furniture	10%	3,00,000	1,40,000

Solution :

(1) Depreciation shall have to be calculated at the prescribed rates, as is applicable for a going concern, without considering the event of amalgamation or demerger.

(2) Depreciation shall have to be apportioned between the predecessor and the successor in the ratio of number of days for which such assets were held for their business purpose and used by them.

Depreciation to be apportioned = [W.D.V. as on 1.4.2010 + New Purchases on 01.05.2010]

= ₹ (6,50,000 + 50,000) = ₹ 7,00,000 × 10% = ₹ 70,000

Depreciation Statement as per Income Tax Act, 1961

Particulars of Block of Assets	Rate Of Dept.	W.D.V as on 01.04.2010	Additional Actual Cost	Debenture	Net Value of Block	Depreciation for the Current Year	W.D.V. as on 31.3.2011
1	**2**	**3**	**4**	**5**	**6**	**7**	
Block I – Building	10%	30,00,000	**Nil**	**Nil**	30,00,000	**3,00,000**	**27,00,000**
Block – II Plant & Machinery	15%	20,00,000	**Nil**	**Nil**	20,00,000	**3,00,000**	**17,00,000**

Block – III Motor Car	15%	8,00,000	**Nil**	**Nil**	8,00,000	**1,20,000**	**6,80,000**
Block – IV Computers	60%	5,00,000	**Nil**	**Nil**	5,00,000	**3,00,000**	**2,00,000**
Block – V Furniture	10%	3,00,000	**Nil**	**Nil**	3,00,000	**30,000**	**2,70,000**
		56,00,000			**56,00,000**	**10,50,000**	**45,50,000**

TOTAL DEPRECIATION ADMISSIBLE ₹ 10,50,000

<u>Statement showing Apportionment of Depreciation and Allowable Depreciation</u>

Assessee	**No. of Days**	**Depreciation on Assets on the date of amalgamation**	**Depreciation on Assets acquired after amalgamation**	**Total Depreciation for the Previous Year 2010-11**
P Ltd.	01.04.2010 to 31.7.2010 = 122 days	₹ 10,50,000 × 173/365 = ₹ 4,97,671	Nil	₹ 4,97,671
Q Ltd.	01.08.2010 to 31.3.2011 = 243 days	₹ 10,50,000 × 243 × 365 = ₹ 6,99,041	Nil	₹ 6,99,041

Question No.5(j)

Mr. Hari purchased a house property on 18.11.2006 for ₹ 15,00,000. Till 1.7.2010, the same was self-occupied for own residence. Thereafter, the said building was brought into use for the purpose of his profession. Determine the amount of depreciable admissible for the Assessment Year 2011-12, given rate of depreciation @ 10%.

Solution :

(a)Property acquired by the assessee himself: As per Sec. 43(1), if a building/asset used for private purpose of the assessee is subsequently put to use for the purpose of business, the cost of acquisition shall be determined in the following manner:

Assessee: Mr. Hari **Previous Year: 2010-11** **Assessment Year: 2011-12**

	₹
Cost of acquisition of Residential House Property as on 18.11.2006	15,00,000
Less: Deemed depreciation for the Financial year 2006-07 @ 50% of 10% on ₹ 15,00,000 (since period of usage is less than 180 days)	<u>75,000</u>
WDV as on 01.04.2007	14,25,000
Less: Deemed Depreciation for Financial year 2007-08 @ 10% on ₹14,25,000	<u>1,42,500</u>
WDV as on 01.04.2008	12,82,500
Less: Deemed Depreciation for Financial year 2008-09 @ 10% on ₹12,82,500	<u>1,28,250</u>
WDV as on 01.04.2009	11,54,250
Less: Deemed Depreciation for Financial year 2009-10 @ 10% on ₹11,54,250	<u>1,15,425</u>
WDV as on 01.04.2010 = Actual cost for the purpose of charging depreciation	**10,38,825**
Less: Deemed Depreciation for Financial year 2010-11 @ 10% on ₹10,38,825	<u>1,03,883</u>
WDV as on 01.04.2011	**<u>9,34,942</u>**

Question 6(a):

X Ltd., is a company engaged in the business of growing, manufacturing and selling of tea. For the accounting year ended 31st March, 2010, its composite business profits, before an adjustment under section 33AB of the Income-tax Act, were ₹ 60 lakhs. In the year, it deposited ₹ 25 lakhs with NABARD. The company has a business loss of ₹ 10 lakhs brought forward from the previous year.The company withdrew in February, 2010 ₹ 20 lakhs from the deposit account to buy a non-depreciable asset for ₹18 lakhs and could not use the balance before the end of the accounting year. The withdrawal and the purchase were under a scheme approved by the Tea Board.

The non-depreciable asset was sold in November, 2010 for ₹ 29 lakhs. Indicate clearly the tax consequences of the above transactions and the total income for the relevant years.

Computation of Total Income of X Ltd. for A.Y. 2010-11

Particulars	**₹**
Net profits before adjusting deduction u/s 33AB	60,00,000
Less: Deduction u/s 33AB	24,00,000
[Lower of	
(i) 40% of ₹60 lakhs = ₹ 24 lakhs; or	
(ii) actual amount deposited with NABARD = ₹ 25 lakhs	
Profits after adjusting deduction u/s 33AB	36,00,000
As per Rule 8 of Income-tax Rules, 40% of this sum is subject to income-tax and the balance 60% is treated as agricultural income.	
Hence, the business income is 40% of ₹36 lakhs	14,40,000
Add: Non-utilisation of amount withdrawn:	
₹ 2 lakhs [i.e. (₹20 lakhs – ₹18 lakhs)]	
40% is taxable as business income (the balance 60% is treated as agricultural income).	80,000
Business income	15,20,000
Less: Business loss brought forward from the previous year	10,00,000
Total Income	**5,20,000**

Computation of Total Income of X Ltd. for A.Y.2011-12

Particulars	**₹**
Business income **(See Note 2)**	7,20,000
Capital gains (Short-term) **(See Note 1)**	11,00,000
Total Income	**18,20,000**

Note 1 - Computation of capital gains

Particulars	**₹**
Sale proceeds	29,00,000
Less: Cost of acquisition	18,00,000
Short term capital gains (since the period of holding is less than 36 months)	**11,00,000**

Question No.6(b)

Free Call Ltd. obtained a telecom licence on 15.6.07 for a period of 8 years ending on 31.3.2015 against a fee of ₹30 crores to be paid in four instalments of ₹12 crores, ₹7 crores, ₹6 crores, ₹5 crores by June 2008, June 2009, June 2010 and June 2011 respectively. Explain how the payment for licence fee shall be dealt under the Income Tax Act, 1961.

Solution :

Assessee : Free Call Ltd. **Previous Year 2010-11** **Assessment Year: 2011-12**

(a) U/s 35ABB, expenditure incurred for the purpose ofacquiring any right to operate telecommunication services is allowed equally as deduction throughout the unexpired life of the licence. Deduction shall be allowed **only for the actual payment made.**

(b) If only part payment is made, amortization is based on the amount paid and not on the basis of total consideration. For any further payments, deduction/amortization is allowed equally for the remaining unexpired useful life.

(c) Computation of amount of eligible deduction u/s 35 ABB:

Previous year	Amount paid (₹ crores)	Unexpired Period of Licence on the date of actual payment	Amount of Deduction (₹ crores)
2007-08	12.00	8 years	1.50
2008-09	7.00	7 years	[1.50 + (7.00/7)] = 2.50
2009-10	6.00	6 years	[2.50 + (6.00/6)] = 3.50
2010-11	5.00	5 years	[3.50 + (5.00/5)] = 4.50

Question No.6(c)

Hello International Ltd. incurs an expenditure of ₹ 240 crores for acquiring the right to operate telecommunication services for Assam & Sikkim. The payment was made in November 2009 and the licence to operate the services was valid for 15 years. In December 2010, the company transfers part of the licence, in respect of Assam, to Hi International Ltd. for a sum of ₹56 crores and continue to operate the licence in Sikkim. What is the deduction allowable u/s 35ABB to Hello International Ltd. for the Assessment Year 2011-12?

Solution :

Assessee: Hello International Ltd. **Previous Year: 2010-11** **Assessment Year : 2011-12**

(a) u/s 35ABB, where part of the Telecom Licence is transferred and Net Consideration received on such transfer, is less than the expenditure remaining unallowed, the amount of deduction shall be computed as follows :

(i) Unallowed amount as on 01.04.2010 = Total Expenditure Less Deduction for Financial Year 2009-10
= ₹240 crores Less (₹240 crores/licence period of 15 years)
= ₹240 crores less ₹16 crores = ₹224 crores.

(ii) Net Consideration received = ₹60 crores

(iii) Remaining period of licence = 14 years (including current previous year)

(iv) Deduction u/s 35 ABB = ₹ (224 crores less 56 crores) / 14 years= ₹12 crores.

Question No.6(d)

Jammer International Ltd. incurs an expenditure of ₹ 300 crores for acquiring the right to operate telecommunication services for Orissa and Jharkhand. The payment was made in August 2009 and the licence to operate the services was valid for 12 years. In December 2010, the company transfers part of the licence, in respect of Orissa to Hammer International Ltd. for a sum of ₹280 crores and continue to operate the licence in Jharkhand What is the deduction allowable u/s 35ABB to Jammer International Ltd. for the Assessment Year 2011-12?

Solution:

Assessee: Jammer International Ltd. **Previous Year: 2010-11** **Assessment Year : 2011-12**

(a) u/s 35ABB, where part of the Telecom Licence is transferred and Net Consideration received on such transfer, is more than the expenditure remaining unallowed, the amount of deduction shall be computed as follows :

(i) Unallowed amount as on 01.04.2010 = Total Expenditure Less Deduction for Financial Year 2009-10
= ₹ 300 crores Less (₹ 300 crores / licence period of 12 years)
= ₹ 300 crores less ₹ 25 crores= ₹ 275 crores.

(ii) Net Consideration received = ₹ 280 crores

(iii) Remaining period of licence = 11 years (including current previous year)

(iv) Deduction u/s 35 ABB = ₹ (224 crores less 56 crores) / 14 years =
= ₹ 12 crores.

Question No.6(e)

Sleepwell Ltd. is an existing Indian Company, which sets up a new industrial unit. It incurs the following expenditure in connection with the new unit:

	₹
Preparation of project report	4,00,000
Market survey	5,00,000
Legal and other charges for issue of additional capital required for the new unit	2,00,000
Total	**11,00,000**
The following further data is given:	
Cost of project	30,00,000
Capital employed in the new unit	40,00,000

What is the deduction admissible to the company under section 35D for Assessment Year 2011-12?

Solution:

The deduction admissible under section 35D is one-fifth of the expenditure incurred for the project. This works out to ₹ 2,20,000.

However, such expenditure should not exceed the following limits as prescribed in section (3):

(a) 5% of cost of the project or

(b) 5% of the capital employed in the new industrial undertaking (being a company) — whichever is higher.

In this case

(a) 5% of the project cost is ₹ 1,50,000 and

(b) 5% of the capital employed is ₹ 2,00,000.

Hence, the expenditure eligible for amortization under section 35D would be ₹ 2,00,000.

And the admissible deduction for the current assessment year is 2,00,000 × 1/5 = ₹ 40,000.

Question No.7(a)

Ms.Chitralekha, a retail trader of Kolkata furnishes the following Trading and Profit and Loss Account for the year ending 31st March, 2011:

Trading and Profit and Loss Account for the year ended 31.03.2011

		₹			₹
To	Opening stock	90,000	By	Sales	12,11,500
To	Purchases	10,04,000	By	Income from UTI	2,400
To	Gross Profit	3,06,000	By	Other business receipts	6,100
			By	Closing stock	1,80,000
		14,00,000			14,00,000
To	Salary	60,000	By	Gross profit b/d	3,06,000
To	Rent and rates	36,000			
To	Interest on loan	15,000			
To	Depreciation	1,05,000			
To	Printing & stationery	23,200			
To	Postage & telegram	1,640			
To	Loss on sale of shares (Short term)	8,100			
To	Other general expenses	7,060			
To	Net Profit	50,000			
		3,06,000			**3,06,000**

Additional Information:

(i) It was found that some stocks were omitted to be included in both the Opening and Closing Stock, the values of which were

Opening stock ₹ 9,000

Closing stock ₹ 18,000

(ii) Salary includes ₹10,000 paid to his brother, which is unreasonable to the extent of ₹2,000.

(iii) The whole amount of printing and stationery was paid in cash.

(iv) The depreciation provided in the Profit and Loss Account ₹ 1,05,000 was based on the following information :

The written down value of plant and machinery is ₹4,20,000. A new plant falling under the same Block of depreciation of 25% was bought on 1.7.2010 for ₹70,000. Two old plants were sold on 1.10.2010 for ₹ 50,000.

(v) Rent and rates includes sales tax liability of ₹3,400 paid on 7.4.2010.

(vi) Other business receipts include ₹2,200 received as refund of sales tax relating to 2008-09.

(vii) Other general expenses include ₹ 2,000 paid as donation to a Public Charitable Trust.

You are required to advise Ms.Chitralekha whether he can offer his business income under section 44AF.

Solution:

Let us assume that the facts relate to previous year relevant to assessment year 2011-12 and accordingly compute the income of Ms.Chitralekha.

Computation of business income of Ms. Chitralekha for the assessment year 2011-12.

		₹	₹
Net Profit as per profit and loss account			50,000
Add :	Inadmissible expenses / losses		
	Under valuation of closing stock	18,000	
	Unreasonable salary paid to brother (section 40A(2)	2,000	
	Printing and stationery paid in cash [Section 40A(3)] 100% of ₹23,200	43,200	
	Depreciation (considered separately)	1,05,000	
	Short term capital loss on shares	8,100	
	Donation to public charitable trust	2,000	1,78,300
			2,28,300
Less :	**Deductions items:**		
	Under valuation of opening stock	9,000	
	Income from UTI	2,400	
	Refund of sales tax [Taxable u/s.41(1) – No adjustment necessary]	—	11,400
	Business income before depreciation		**2,16,900**
Less :	Depreciation (see note 1)		**66,000**
			1,50,900

Computation of business income as per section 44AF

As per section 44AF, the business income would be 5% of turnover

12,11,500 × 5 /100 = ₹60,575

The business income under section 44AF is **₹ 60,575.**

As the business income under section 44AF is lower than the business income as per the normal provisions of the Act, it is advisable for Mr. Sivam to offer the business income under section 44AF of the Act

Note 1

Calculation of depreciation

WDV of the block of plant & machinery as on the first day of previous year	4,20,000
Add : Cost of new plant & machinery	70,000
	4,90,000
Less : Sale proceeds of assets sold	50,000
WDV of the block of plant & machinery as on the last day of previous year	4,40,000
Depreciation @ 15%	66,000

Note : No additional depreciation is allowable as the assessee is not engaged in manufacture or production of any article.

Note 2

Since sales-tax liability has been paid before the due date of filing return of income under section 139(1), the same is deductible.

Question No.7(b)

Mukund is a person carrying on profession as film artist. His gross receipts from profession are as under :

Financial year	2008-2009	1,25,000
Financial year	2009-2010	1,60,000
Financial year	2010-2011	1,80,000

Is he required to maintain any books of account under Section 44AA of the Income-tax Act? If so, what are these books?

Answer :

Section 44AA requires every person carrying on any profession, notified by the Board of the Official Gazette (in addition to the professions already specified) to maintain such books of account and other documents as may enable the Assessing Officer to compute his total income in accordance with the provisions of the Income-tax Act. The CBDT has notified the profession of film artists as one such profession (S.O. No.17E/12-1-77). Hence section 44AA applies to Mukund.

Sub-section (3) of section 44AA authorizes the Board to prescribe by rules, the books of account and other documents (including inventories) to be kept and maintained under sub-section (1), the particulars to be contained therein etc. The prescribed rule is Rule 6F, under which every person carrying on the specified profession, including a film artist, is required to maintain the books of account and other documents specified in sub-Rule (2).

However, under the proviso to Sub-Rule (1), nothing contained therein shall apply in the case of a person, if his gross receipts do not exceed ₹ 1,50,000/- in any one of the three years, immediately preceding the previous year.

The significance of this rule is that if the gross receipts from profession do not exceed ₹ 1,50,000 in any one of the previous 3 years, he is not required to maintain the books of account specified in sub-rule (2) of Rule 6F. Since in one of the three previous years the gross receipts are below ₹ 1,50,000, the assessee is not required to maintain books of account and other documents as he is not governed by section 44AA.

Question No. 7(c)

Discuss the tax implications of the following transactions in the case of a doctor running a nursing home :

		₹
(1)	Amount paid to a scientific research association approved by the Central Government and run by a drug manufacturing company	20,000
(2)	Amounts received from the employees of the nursing home as contributions	

	towards provident fund for the month of March, 2011 paid to the PF Commissioner on 25th April, 2011	25,000
(3)	Repayment made in cash towards purchases of medicines	50,000
(4)	Repayment of loan taken from a bank for doing a post-graduate course in medicine – instalment	50,000
	Interest	10,000

Answer :

(i). Under section 35(ii), 125% of the sums paid to scientific research association, which has as its object the undertaking of scientific research is deductible.

Deduction admissible = 20,000 + (1/4 × 20,000)

= ₹ 25,000.

(ii) Under clause (x) of sub section 24 of section 2, any sum received by an assessee from his employees as contribution to any provident fund is deemed to be his income. Such income is deductible under section 36(1) (va) only if it is credited to the employees' account in the relevant fund by the due date.

Under Employees' Provident Fund Act, the due date for the payment of the contribution is the 15th of the month following the month for which the contribution is due. A grace period of 5 days is also allowed. Hence the payment of the employee's contribution for the P.F. Commissioner should have been made by 20th April. Since the payment has been made on 25th April, the deduction is not available.

(iii) Under section 40A(3) payments made in cash exceeding ₹ 20,000 are not allowable in computing the income from business or profession. 20% of such expenditure is liable to be disallowed. Hence ₹ 10,000 will be disallowed. It is assumed that the case is not covered by the exceptions under Rule 6DD.

(iv) Under section 80E, a deduction is admissible in the case of an individual towards any amount paid in the previous year by way of interest on loan taken from any financial institution for the purpose of pursuing his higher education. The purpose stated in the question is covered by the section. The deduction is allowable only towards payment of interest. The amount deductible under section 80-E would be ₹10,000.

Question No. 7(d)

Suppose the payment of voluntary retirement is made to X as under :

Previous year	**Amount paid (₹)**
2007-08	20,00,000
2008-09	12,00,000
2009-10	14,00,000
	46,00,000

In this case the deduction of expenses incurred under voluntary retirement scheme shall be allowed as under :
Assessment year 2008-09 : ₹ 4,00,000 (1/5th of ₹ 20,00,000) and balance ₹ 16,00,000 in 4 equal instalments in the next four assessment years i.e. assessment years 2009-10 to 2012-13.
Assessment year 2009-10 : ₹ 6,40,000 i.e. ₹ 4,00,000 on account of payment made in previous year 2007-08 and ₹ 2,40,000 (1/5th of ₹ 12,00,000 paid on previous year 2008-09).
Assessment year 2010-11 : ₹ 9,20,000 i.e. ₹ 6,40,000 (₹ 4,00,000 + ₹ 2,40,000 for payment made in previous year 2007-08 and 2008-09 respectively) and ₹ 2,80,000 on account of payment made in previous year 2009-10.
Assessment year 2011-12 : ₹ 9,24,000 (₹ 4,00,000 + ₹ 2,40,000 + ₹ 2,80,000)
Assessment year 2012-13 : ₹ 9,20,000 (₹ 4,00,000 + ₹ 2,40,000 + ₹ 2,80,000)
Assessment year 2013-14 : ₹ 5,20,000 (₹ 2,40,000 + ₹ 2,80,000)
Assessment year 2014-15 : ₹ 2,80,000
Total amount allowed in various assessment years ₹ 46,00,000.

Question No. 8(a)

Mr Sudhir Sharma, resident in India, for the year ending on 31 March 2011. Compute his income from business and his gross total income for the assessment year 2011-2012.

Profit & Loss Account for the year ended 31.3.10

Dr. *Cr.*

Expenditure	₹	Receipts	₹
To purchases	1,90,000	By sales less returns	5,69,300
To salaries and wages	1,40,000	By bad debts recovered, allowed in earlier years by the Assessing Officer	2,000
To trade expenses	1,000		
To purchase of trademarks	50,000		
To registration of trademarks	2,000	By interest on securities (gross)	892
To rent, rates and taxes	5,000	By dharmada, mandir and gaushala receipts	2,000
To discount allowed	1,500		
To household expenses	6,000	By refund on income tax	1,008
To advertisement bill paid in cash	30,000	By proceeds of life insurance policy on maturity	43,500
To income tax	10,000		
To sales tax paid	3,000		
To purchased technical know-how	12,000		
To expenses incurred on income tax and sales tax proceedings	15,100		
To contribution paid to a trust for staff welfare	1,000		
To staff welfare expenses incurred	700		
To OYT deposit	5,000		
To postage and telegrams	1,300		
To donation to National Defence Fund	2,500		
To life insurance premium on the life of the assessee	2,000		
To interest on capital	5,000		
To interest on loan taken to pay income tax	500		
To wealth tax	500		
To audit fee	1,000		
To entertainment expenditure	30,000		
To gifts and present to five customers, costing ₹ 3,000 each	15,000		
To expenses on apprentice training	4,000		
To emergency risk insurance	200		
To fire insurance premium for stock	200		
To provision for bad and doubtful debts	3,000		
To reserve for pecuniary losses	5,000		
To net profit	76,000		
Total	6,18,700		6,18,700

Solution :

Computation of Gross Total Income for the Assessment Year 2011-2012

Particulars	₹	₹
Income from Business		
Net profit as per profit and loss account		76,000
Add: Expenses inadmissible in computing profits and gains from		

business or profession:

Purchase of trademarks	50,000	
Household expenses [Sec. 37(1)]	2,500	
Advertisement bills paid in cash [Sec. 37(1) r.w. Sec. 40A (3)] @ 100% of ₹ 30,000	30,000	
Income tax [Sec. 40(a)(ii)]	10,000	
Purchase of technical know-how	12,000	
Contribution to a Trust for staff welfare fund [Sec. 40A (9)]	1,000	
Donation for National Fund [Sec. 37(1)]	2,500	
Life Insurance premium [Sec. 37(1)]	2,000	
Interest on capital [Sec. 36(1)(iii)]	5,000	
Interest on loan to pay income tax [Sec. 37(1) r.w. 40{a)(ii)]	500	
Wealth tax [Sec. 40(a)(iii)]	500	
Provision for bad and doubtful debts [Sec. 37(1) r.w. 36(1)(vii)(2)]	2,000	
Reserve for pecuniary losses [Sec. 37(1)]	6,000	1,24,000
		2,00,000
Less:		
(a) Income not relating to business or profession: [Sec. 28(i)] Interest on government securities	892	
(b) Dharada, mandir and gaushala receipts	2,000	
(c) Refund of income tax	1,008	
(d) Proceeds of L.I.P.: It is not a business receipt and exempt [Sec. 10(10)]	43,500	
(e) Depreciation on trademarks; 25% of ₹ 50,000	12,500	
(f) Depreciation on know-how: 25% of ₹ 12,000	3,000	59,400
Income from business		**1,40,600**

Statement of Gross Total Income for the Assessment Year 2010-2011

1. Income from business	1,40,600
2. Income from other sources— Interest on securities	892
Gross total income	**1,41,492**

Note :

1) Bad debts deducted in earlier years and now recovered, has been rightly included in the profit and loss account as business income [Sec. 41(4)].
2) Since payment of income tax is not deductible, its refund cannot be taxed as deemed profits [Sec. 41(1)].
3) OYT (own your telephone) deposit is an allowable deduction in the year in which it is paid.
4) "Dharmada", "mandir" and "gaushala" receipts are customarily levies by trader for charitable purposes. Amount received under these heads are not trading receipts. The fact that the amount collected under these heads are spent for other purposes would amount to breach of trust but it would not affect the initial nature and character of the receipt. Such receipts are not taxable.
5) The assessee is entitled to the deduction in respect of donation to National Defence Fund under Sec. 80G.
6) Life insurance paid by assessee on his life is allowed to be deducted in imputing total income under Sec. 80C.
7) Any payment on advertisement exceeding ₹ 20,000 should be made by on account payee cheque or account payee bank draft. Since the payment has been made in cash, 100% of advertisement has been disallowed [Sec. 37(1) r.w. Sec. 40A(3)]. 'Crossed cheque' requirement has been amended by 'account payee' cheque. It is operative from 13-07-2008.
8) From the assessment year 2001-2002, intangible assets also fall within the scheme of depreciation. Hence, depreciation has been allowed on trademarks and know-how.
9) Registration expense of trademarks is revenue expenditure, allowed under Sec. 37(1).

Question No.8(b): Dr L. Kochagaway is a renowned medical practitioner. He furnishes his receipts and payments account for the financial year 2010-2011:

Dr. *Cr.*

Receipts		₹	Payments		₹
To balance b/d		35,000	By rent of clinics:		
To consultation fees :			2008-2009	13,600	
2007-2008	25,000		2009-2010	44,800	
2008-2009	1,80,000		2010-2011	26,600	85,000
2009-2010	2,62,000	4,67,000	By electricity and water		12,000
To visiting fees		1,30,000	By purchase of professional books		18,000
To loan from bank for professional purposes		2,25,000	By household expenses		97,800
			By municipal taxes paid in respect of property		12,000
To sale of medicines		1,73,000			
To gift/presents from patients		15,000	By purchase of motor car		2,45,000
To remuneration from articles published in professional magazines		26,000	By Telephone Charges		10,000
			By fire insurance in respect of property		3,200
To rent from house property		96,000	By surgical equipment		44,700
To interest on Post Office National Savings Certificates		17,000	By advance income tax		43,000
			By salary and perquisite to compounder		72,000
			By entertainment expenses		16,000
			By purchase of X-ray machine		2,00,000
			By expenses of income-tax proceedings		15,000
			By life insurance premium		25,000
			By gifts to wife		25,000
			By interest on loan		12,000
			By loan a/c—instalment paid		25,000
			By donation to Political Party		2,500
			By car expenses		36,000
			By purchase of medicines		1,05,000
			By balance c/d		79,800
		11,84,000			**11,84,000**

Compute his income from profession and gross total income for the assessment year 2011-2012 after taking into account the following additional information:

1. One-third of the car expenses are in connection with personal use.
2. Depreciation on motor car is allowed at the rate of 15%.
3. The construction of the house property was completed in March 2006. It was let out for residential purposes.
4. Expenses on income tax proceeding include ₹ 1,000 paid for the preparation of return of income.
5. Receipts outstanding from patients for 2010-2011, amount to ₹ 8,000.
6. Closing stock of medicines is ₹ 8,000 but its current market price is ₹ 12,000.
7. Books purchased include annual publications of ₹ 12,000, purchased in December 2010.

Solution :

Computation of Income from Profession for the Assessment Year 2011-2012

Particulars		₹	₹
Income from Profession :			
(a) Receipt from profession:			
1. Consultation fees: [Sec. 28(i)]: (₹ 25,000 + ₹ 1,80,000 + ₹ 2,62,000)			4,67,000
2. Visiting fees [Sec. 28(i)]			1,30,000
3. Sale of medicines [Sec. 28(i)]			1,73,000
4. Gifts and presents from patients [Sec. 28(iv)]			15,000
5. Remuneration from articles published in professional magazines [Sec, 28(i)]			26,000
			8,11,000
(b) Closing stock of medicines			8,000
Total receipts and closing stock			**8,19,000**
Less: Expenses allowable:			
1) Rent of clinic [Sec. 30]		85,000	
2) Electricity and water [Sec. 37(1)]		12,000	
3) Salary of compounder [Sec. 37(1)]		72,000	
4) Entertainment expenses [Sec. 37(1)]		16,000	
5) Expenses on income-tax proceedings [Sec. 37(1)]		15,000	
6) Interest on loan [Sec. 37(1)(iii)]		12,000	
7) Purchase of medicines [Sec. 37(1)]		1,05,000	
8) Car expenses [Sec. 37(1)] (2/3 x ₹ 36,000)		12,000	
9) Depreciation on professional books :			
(i) Annual publications: 12,000 × 100% × 50%		6,000	
(ii) Other books: 6,000 × 60%		3,600	
10) Depreciation on car [Sec. 32 r.w. Sec. 38] : 15% of 2,45,000 × 2/3		24,500	
11) Depreciation on plant and machinery:			
(i) X-ray machine	2,00,000		
(ii) Surgical equipment	44,700		
Depreciation @ 15% of	2,44,700	36,705	
12) Telephone Charges		10,000	4,09,805
Taxable Income from Profession			**4,09,195**
Computation of Income from House Property :			
Gross annual value on the basis of rental valuation		96,000	
Less: Full municipal taxes paid by the owner		12,000	
Net annual value		**84,000**	
Less: Statutory deduction: 30% of net annual value		25,200	
Income from House Property			58,800
Gross Total Income			**4,67,995**
Less: Deduction u/s 80C (LIC premium paid)			**25,000**
Less: Deduction u/s 80GGC			**2,500**
(Actual amount of donation to political party)			
Total Income			**4,40,495**
Total Income rounded off u/s 288A			**4,40,490**

Notes :

1. Purchase of motor car is capital expenditure. Hence, it is not deductible. Depreciation has been allowed on motor car.
2. Plant includes books and surgical equipment. Depreciation on professional books is allowed @ 60% but annual publications are written off @ 100%. However, as annual publications have been put to use for less than 180 days during the year, depreciation has been allowed @ 50%. The assessee can claim depreciation on surgical equipment at general rate.
3. Contribution of articles to periodicals and magazines constitutes income from vocation of the assessee.
4. Expenses in income-tax proceedings are wholly deductible [Sec. 37(1)].
5. One-third of car expenses and proportionate deprecation in respect of motor car have been disallowed as they are in connection with the personal use of the assessee.
6. Interest on Post Office National Saving Certificates is exempt from income tax [Sec. 10(15)].
7. Profits and gains of the business or profession are computed according to the method of the accounting regularly followed by the assessee (Sec. 145). Since the assessee has adopted cash system of accounting. "Income" is taxable on receipt basis and "expenditure" is allowed to be deducted on payment basis, irrespective of the previous year to which the receipt of payment belongs. Receipts outstanding for the previous year 2010-2011 will not be taken into consideration.
8. Profits and gains of business profession is required to be computed according to the system of accounting regularly followed by the assessee but if the income cannot be properly deduced therefrom, the Assessing Officer may compute the income on such basis and in such manner as he may deem fit [Proviso to Sec. 145(1)].

   In view of this, the Assessing Officer may take into account the value of closing stock while determining profits even under cash system of accounting
9. Donation to Political Party is allowed to be deducted from gross total income under Sec. 80GGC.

Question No. 8(c)

The Profit and Loss Account of RAI & Co. for the previous year 2010-2011 is given as follows :

Particulars	₹	Particulars	₹
Purchases of goods	10,00,000	Sale of goods	26,00,000
Salaries, bonus and commission	8,00,000	Closing stock	50,000
Rent, rates and taxes	60,000	Interest on drawings	7,000
Depreciation @ 16% on WDV	20,000	Interest on securities	20,000
Travelling expenses	1,50,000		
Interest on capital	25,000		
Advertisement	1,20,000		
Entertainment expenses	60,000		
Expenditure on neon-sign board	50,000		
New telephone deposit under OYT scheme	5,000		
Compensation for cancelling purchase order of an outdated machine	10,000		
Expenses for promoting family planning among employees	20,000		
Net profit	3,57,000		
	26,77,000		**26,77,000**

Additional Information :

(i)Salaries, bonus and commission include:	₹
(a)Salary to the proprietor	1,50,000
(b)Bonus paid to employees on 15-10-2011	75,000

(c)Salary of ₹ 1,20,000 was paid in India to B, a non-resident employee but neither any tax was deducted at source nor paid thereon. However, B is a PAN holder and has cleared his tax liability.
(d)Advertisement includes:
(i) A hoarding bill paid in cash, ₹ 38,000
(ii) Advertisement published in souvenir, published by a political party ₹10,000
(e)Depreciation has been charged on plants and machinery and furniture and fittings in proportion of 3:2. Depreciation @ 15% on plant and @10% on furniture.
(f)Purchases include goods of ₹1,00,000, imported without a licence and confiscated by the customs authorities.
(g)Travelling expenses include a sum of ₹1,00,000 on foreign travel to purchase a machine. Negotiations have not been finalized.
(h)Annual stock taking revealed a theft of goods, costing ₹ 30,000.
(i)This year stock valuation was deviated from the market price to cost price which is 20% less than its market price. Compute taxable business profits for the Assessment year 2011-12.

Computation of Taxable Business Profits for the Assessment Year 2011-2012

Solution :

Particulars	₹	₹
Income from Business		
Net profit as per profit and loss account		3,57,000
Add: Inadmissible Expenses		
(a) Salary paid to Proprietor	1,50,000	
(b) Bonus paid to employees: Deduction will be allowed in Previous Year 2011-12 (Sec.43B, being disallowance of unpaid liability)	75,000	
(c) Salary paid to non-resident employee, without deducting or paying TDS[Sec.40(a)(iii)]	1,20,000	
(d) Advertisement bills paid in cash [Sec. 37(1) r.w. Sec. 40A(3)] @100% of ₹ 38,000	38,000	
(e) Advertisement in sourvenir published by political party [Sec.37(2B)]	10,000	
(f) Depreciation to be treated separately	20,000	
(g) Expenses on family planning: allowable only to a company assessee [Sec.36(1)(ix)]	20,000	
(h) Foreign travel to acquire a new machine, (being capital in nature, deal not yet finalized. It may be added to the cost of the asset when such asset is actually procured)	1,00,000	
(i) Interest on capital [Sec. 36(1)(iii)] [There is no borrowings]	25,000	
(j) Expenditure on neon sign board, being a capital expenditure on advertisement, hence disallowed.	50,000	
(k) Compensation paid to cancel a capital liability, capital in nature, hence disallowed u/s 37(1)	10,000	
(l) Under valuation of closing stock:[50,000/80% - 50,000]	12,500	
	12,500	6,30,550
		9,87,500
Less: Expenses allowed :		
Interest on Drawings		7,000
Depreciation u/s 32:		
(a) Plant and machinery:		
WDV on 01.04.2010 : 20,000 × 4/5 × 100/16	1,00,000	
Add: Cost of neon-sign board	50,000	

		1,50,000	
Less:	Depreciation @15%	22,500	22,500
	WDV as on 31.3.11	1,27,500	
(b)	Furniture and Fittings:		
	WDV on 01/04/10: 20,000 × 1/5 × 100/16	25,000	
Less:	Depreciation @10%	2,500	2,500
	WDV on 31.3.2011	22,500	
Less:	**Incomes credited to Profit and Loss A/c to be treated under separate Head of Income**		
	Interest on Government Securities		20,000
Taxable Business Profits			**9,35,500**

Note :

(1) Loss due to theft of stock-in-trade is allowable in computing business profits u/s 29. Such loss is incidental to business operation. Since purchase of goods have already been debited to profit and loss account, no separate adjustment is required.

(2) Loss in illegal business may be allowed u/s 29. Explanation to Sec.37(1) does not apply to Sec. 29.

(3) Deposit for new telephone connection is allowable u/s 37(1). Hence, no adjustment is required.

Question No.8(d)

The Profit & Loss Account of Mr. Pratam Basu for the previous year 2010-2011 is given below :

Dr. *Cr.*

Particulars	₹	Particulars	₹
Cost of goods sold	16,00,000	Sales	34,70,000
Salaries wages	9,00,000	Rent of staff quarters	3,00,000
Rent of business premises, owned by the assessee	2,50,000	Sale price of machinery block on 31-03-2011	5,00,000
Repairs and renewals	1,40,000		
Income tax paid	60,000		
Excise duty paid	1,00,000		
Sales tax payable	2,00,000		
Legal expenses	3,00,000		
Municipal taxes payable for staff quarters	10,000		
Provision for bad debts	60,000		
Contingency reserve	1,00,000		
Employees contribution to recognised fund	50,000		
Net profit	5,00,000		
	42,70,000		**42,70,000**

Additional Information :

(i) Salaries include:

(a) ₹ 1,20,000 was paid outside India to an employee, "resident" in India but neither tax was deducted nor tax has been paid thereon,

(b) ₹ 90,000 was paid in India to an employee "resident" in India but neither tax deducted therefrom nor paid thereon.

(ii) Excise duty of ₹ 50,000 for the assessment year 2010-2011 was paid on 1 January 2011 but it was not included in the profit and loss a/c.

(iii) Sales tax amounting ₹ 1,30,000 was paid on 31 July 2011 and the balance was paid on 1 August 2011, the due date of furnishing return of income is 31 July 2011.

(iv) Repairs/renewals include remodelling and renovation costing ₹ 80,000.

(v) Legal expenses include:

(a) Lawyer fee of ₹ 50,000 paid by bearer cheque to K, nephew of the proprietor. The Assessing Officer disallowed a sum of ₹ 10,000, being found in excess of the desired qualifications;

(b) Gift of ₹ 1,20,000, made to wife, a tax-advisor, but disallowed by the A.O.

(vi) Employees contribution include:

(a) ₹ 30,000 credited to their account on due date under Provident Fund rules,

(b) ₹ 20,000 credited to their account in November 2011.

(vii) Commission receipts of ₹ 2,00,000 have not been credited to the profit and loss account as their recovery seems to be doubtful.

(viii) WDV of machinery on 01-04-2010 was ₹ 6,50,000.

(ix) WDV of business premises and staff quarters as on 01-04-2010 : ₹ 10,00,000 and ₹ 30,00,000, respectively. Depreciation @ 10% on Business Premises and @ 5% on staff quarters

Compute taxable profits for the previous year 2010-2011.

Solution :

Computation of Business Profits for the Assessment Year 2011-12

Particulars	₹	₹
Net profit as per profits and loss a/c		5,00,000
Add: Inadmissible Expenses:		
(i) Rent of business premises owned by the assessee (Sec. 30)	2,50,000	
(ii) Remodelling and renovation, being repairs of capital nature	60,000	
(iii) Income tax paid [Sec. 40(a)(ii)l	60,000	
(iv) Sales tax remaining unpaid up to due date of furnishing return of income	70,000	
(v) Legal expense includes:		
(a) Gift made to wife, Sec. 37(1)	1,00,000	
(b) Fees paid to lawyer (being a relative) Sec. 40A(2)	10,000	
(vi) Salaries paid outside India to a "resident" employee TDS [Sec. 40(a)(iii)]	1,20,000	
(vii) Salaries paid in India to a resident employer without TDS	—	
(viii) Municipal tax payable for staff quarters [Sec. 43B]	10,000	
(ix) Provision for bad debts [Sec. 36]	60,000	
(x) Contingency reserve [Sec. 37(1)]	1,00,000	
(xi) Employees' contribution credited to their account after due date	20,000	
(xii) Commission receipts which have accrued during the year but recovery seems doubtful seems doubtful	1,00,000	
(xiii) Employees' contribution not credited to—profit and loss a/c	50,000	10,30,000
		15,30,000
Less: Inadmissible receipts/ admissible claims:		
(i) Excise duty (Sec. 43B)	50,000	
(iii) Sale price of machine, being capital receipts	5,00,000	
(iv) Depreciation: (a) Staff quarters: 5% of 30,00,000	1,50,000	
(b) Business Premises: 10% of 10,00,000	1,00,000	8,00,000
Taxable Business Profits		**7,30,000**

Note :

Sale of machinery block*:* Sale of machinery block results into short-term capital loss of ₹ 1,50,000 (₹ 6,50,000 -₹ 1,00,000) under Sec. 50. No capital loss, whether short-term or long term, can be set- off against any income. It is to be carried forward for next 8 assessment years

Question No.9(a)

The firm of M/s Amal & Associates is engaged in the business of growing and manufacturing tea. The Profit & Loss Account for the year 2010-2011 is given as follows:

Dr. *Cr.*

Particulars	₹	Particulars	₹
Cost of growing and manufacturing tea	40,00,000	Sales	95,00,000
Salaries and wages	15,00,000	Stock	13,50,000
Advertising	5,00,000		
Entertainment expenses	1,00,000		
Travelling expenses	3,00,000		
Fine and penalties	50,000		
Cost of patent rights	6,00,000		
Expenses on scientific research	6,00,000		
General and sundry expenses	2,00,000		
Net profit	30,00,000		
	1,08,50,000		**1,08,50,000**

You are further informed :

(i) Advertising includes payment of ₹ 2,00,000 made to a political party for insertion of advertisement in party's journal. The payment has been made by bearer cheque,

(ii) Travelling expenses include a visit of the director to UK for 10 days (including 2 days for travelling). Five days were utilized for business purpose. Permission for foreign exchange was granted for ₹ 50,000. Total expenditure on the visit is ₹ 1,00,000 (including air fare of ₹ 40,000).

(iii) Expenses on scientific research include:

(a) Purchase of land ₹ 1,50,000

(b) Contribution to Agricultural Research Institute, New Delhi which is a National Laboratory ₹ 20,000.

(c) Contribution to Bhaba Atomic Research Centre (an approved research association) for statistical research, which is not related to business ₹ 30,000.

(iv) Refund of custom duty, deducted in the previous year, 2008-2009, amounting to ₹ 50,000, has not been credited to the profit and loss account.

(v) Sundry expenses include a contribution of ₹ 60,000 to Kolkata Municipal Corporation for undertaking a Drinking Water Project for slum-dwellers The Project has been approved by National Committee but KMC has not issued any certificate indicating the progress of the project.

(vi) A deposit of ₹ 12,00,000 was made in instalments with National Bank for Agriculture and Rural Development (a) ₹ 4,00,000 in September 2010, (b) ₹ 6,00,000 in July 2011 and (c) ₹ 2,00,000 in December 2011. It has not been included in the profit and loss account. Date of submitting return of income 30/09/2011.

(vii) (a) W.D.V. of machinery on 01-04-2010 (Rate of depreciation 15%) ₹15,00,000

(b) Machinery purchased in December 2010 for scientific research ₹ 5,00,000

(c) Purchase of five small drier machine, each costing ₹10,000

(d) Sale price of an old machinery (Rate of depreciation 15%) ₹ 6,00,000

(viii) Lump sum payment of ₹ 5,00,000 was made to acquire a licence regarding technical information to improve tea-flavour. It has not been charged to P/L a/c.

Compute the taxable business profits for the assessment year 2011-2012.

Solution :

Computation of Business Profits for the Assessment Year 2011-2012

Particulars		**₹**	**₹**
Net profit			30,00,000
Add: Inadmissible Expenses:			
1. Advertisement payment to a political party [Sec. 37(2B)]		2,00,000	
2. Travelling outside India [Sec. 37(1)]. Proportionate expenses of foreign travel, (excluding air fare) not relating to business: (60,000 × 3/8)		22,500	
3. Fine and penalties		50,000	
4. Cost of patent rights		6,00,000	
5. Expenditure on scientific research (Sec. 35): Purchase of land		1,50,000	
6. Contribution to Bombay Municipal Committee (Sec. 35 AC):		60,000	10,82,500
Since the Certificate indicating progress in the prescribed form has not been issued, no deduction is allowed.			40,82,500
Add: Deemed profit: Refund of Customs Duty, deducted in earlier years, not credited in the profit and loss a/c [Sec.41(1)]			50,000
Less: Admissible expenses:			
Capital expenditure on scientific research [Sec.35(1)(iv)(2)]		4,00,000	
Depreciation on Patent rights @ 25% of ₹ 6,00,000		1,50,000	
Depreciation on know-how: @ 25% of ₹ 5,00,000		1,25,000	
Depreciation on Machinery:			
WDV as on 01/04/2010:	15,00,000		
Add: Purchase of driers	50,000		
	15,50,000		
Less: Sale of Old Machinery	5,00,000		
WDV as on 31/3/2011	**10,50,000**		
Depreciation @ 15% on ₹ 10,50,000			
Weighted Deduction for scientific research:		1,57,500	
(i) National Laboratory: @ 125% of ₹ 20,000= ₹ 25,000 – ₹ 20,000 = ₹ 5,000			
(ii) Bhaba Atomic Research Laboratory: @ 125% of ₹ 30,000 = ₹ 37,500 – ₹ 30,000 = ₹ 7,500			
Therefore, total deduction ₹(5,000 + 7,500)		12,500	8,45,000
Composite Profits before making deduction u/s 33AB			**32,87,500**
Less: Deposit with NABARD (Sec.33AB)			
Least of the followings:			
(i) Deposit of ₹ 10,00,000 (within the due date of submission of return)			
(ii) 40% of Business Profits: 40% of ₹ 32,87,500 = ₹ 13,15,000			10,00,000
Composite Profits after deduction u/s 33AB			**22,87,500**

Apportionment of profits into agricultural income and business income (As per Rule 8)[since the assessee is engaged in the business of growing and manufacturing tea: 40% of ₹ 22,87,500	<u>9,15,000</u>

Question No. 9(b) : State whether the provisions or Sec. 41(1) of the Act can be applied to a case, where refund of excise duty has been obtained by the assessee on the basis of a decision of the CEGAT and where the matter has been taken up in further appeal to the Court by the Central Excise Department.

Answer: This question has been answered by the Apex Court in Polyflex (India) Pvt. Ltd. *v.* CIT [2003] 257 ITR 343. (SC)

The refund of excise duty pursuant to the decision of the CEGAT would be subject to tax by virtue of Sec. 41(1) and it is not necessary that the revenue should await the verdict of a higher court.

Question No. 9(c) In the course of an assessment proceeding, the Assessing Officer enhanced the value of the closing stock and added the difference to the total income. In the assessment year subsequent to this, the assessee wants the Assessing Officer to enhance, by the same amount, the value of the opening stock of the year. Discuss the validity of the claim.

Answer: The value of the closing stock of the preceding year must be the value of the opening stock of the succeeding year. Hence, if the value of closing stock at the end of a year is enhanced, the enhanced value should be taken as the value of the opening stock of the next year for the purpose of income tax.

The claim of the assessee in this case is, therefore, valid.

Question No. 10(a)

A firm comprising of four partners A, B, C and D carrying on business in partnership, sharing profits/losses equally shows a profit of ₹ 2,00,000 in its books after deduction of the following amounts for the year :

	Particulars	₹
(a)	Remuneration to partner 'A' who is not actively engaged in business	60,000
(b)	Remuneration to partners 'B' & 'C' actively engaged in business	
	Partner 'B'	80,000
	Partner 'C'	90,000
(c)	Interest to partner 'D' on loan of ₹ 1,50,000	36,000

The deed of partnership provides for the payment of above remuneration and interest to partners. You are required to work out the taxable income of the firm as well as partners for assessment year 2011-12.

Solution :

Computation of Income under the head Profits and Gains of Business or Profession

			Particulars	₹
Net profit as per P/L A/c				2,00,000
Add :	**Inadmissible expenses —**			
	(i)	Remuneration to A (not an active partner) – disallowed u/s 40(b)		60,000
	(ii)	Remuneration to B and C		1,70,000
		– (considered separately [₹ 80,000 + 90,000]		
	(iii)	Interest paid to D on Loan advanced		36,000
Net Profit before Interest and Remuneration to Partners				**4,66,000**
Less :	Maximum Permissible Interest u/s 40(b)			

@ 12% on Loan from D = ₹ 1,50,000 × 12% p.a.			18,000
Book Profit			**4,48,000**
Less : Maximum Permissible Remuneration to **B** and **C** u/s 40(b)			
(i) upto ₹ 3,00,000 – ₹ 1,50,000 or 90% of Book Profits, whichever is higher	= 2,70,000		
Balance of Book Profits – 60% of Book Profits = 60% of 1,48,000	= 88,800	3,58,000	
(ii) Actual Remuneration paid			
lower of (i) & (ii), allowed as deduction		1,70,000	1,70,000
Taxable Income			**2,78,000**

Taxable income of the partners

Particulars	A	B	C	D
Remuneration	Nil	80,000	90,000	Nil
Interest	Nil	Nil	Nil	18,000
Taxable income	Nil	80,000	90,000	18,000

Working notes :

(1) In the case of a firm, remuneration to a partner who is not a working partner is not eligible for deduction. In the case of working partners the remuneration paid is disallowed if it exceeds the limit prescribed u/s 40(b) with reference to "book profit".

Book working partners remuneration is worked out as under :

	₹
First ₹ 3,00,000 of the book profit @ 90%	2,70,000
On the balance ₹ 1,98,000 of book profit @ 60%	1,18,800
Total	**3,88,800**

(2) Any interest and salary to partners disallowed in the firm's case shall not be included in the total income of the partner and shall not be chargeable to tax in the partner's hands.

(3) Share of profits of the partners is exempt u/s 10(2A) of the Income-tax Act and therefore, not included in the partner's taxable income.

Question No.10(b) Bharat, owner of Great India Roadways, furnishes following details for the A.Y. 2011-12.

	₹
Revenue from customers	31,00,000
Less : **Expenses**	
Rent of office premises	1,80,000
Rent of godown	2,40,000
Truck Driver salary	5,00,000
Allowance to truck driver	1,20,000
Cost of petrol, diesel, etc	7,50,000
Other expenses other than depreciation	2,00,000
Income from business without charging depreciation	**11,10,000**

Additional Information :

Great India Roadways have following details of its assets —

Assets	Written down value as on 1.4.2010
Office Premises	₹ 2,50,000
Machinery block (30%) consists of —	₹ 20,00,000
— 2 Diesel engine trucks of 13000 kgs each	

— 2 Diesel engine trucks of 10000 kgs each

— 1 Petrol engine truck of 12000 kgs

During the year, he purchased 2 medium-size-truck (petrol engine) for ₹ 3,50,000 each on 13.7.2010. However, 1 petrol engine truck of 12,000 kgs was sold on 9.9.2010 for ₹ 1,00,000.

Compute his income under the head Profits & gains of business or profession.

Solution :

Computation of Profits & Gains of Business or Profession of Shri Bharat for the A.Y. 2011-12

Particulars	Amount
Net profit as per Profit and Loss A/c	11,10,000
Less : **Expenditure allowed but not debited to P & L A/c**	
Depreciation u/s 32 (Note)	8,05,000
Profits & gains of business or profession	**3,05,000**

Note : Computation of depreciation allowed u/s 32

Particulars	Details	Amount
Block 1 : **Office Premises @ 10%**		
W.D.V. as on 1.4.2010	2,50,000	
Add : Purchase during the year	Nil	
	2,50,000	
Less : Sale during the year	Nil	
	2,50,000	
Depreciation @ 10% on ₹ 2,50,000		25,000
Block 2 : **Trucks @ 30%**		
W.D.V. as on 1.4.2009	20,00,000	
Add : Purchase during the year	7,00,000	
	27,00,000	
Less : Sale during the year	1,00,000	
	26,00,000	
Depreciation @ 30% on ₹ 26,00,000		7,80,000
Depreciation allowed u/s 32		8,05,000

Alternative II: Computation of income u/s 44AE

No. of vehicle	Type of goods carriage	Month including part of month	Details	Income ₹
2 Diesel engine trucks of 13000 kgs each	Heavy	12	3500×12×2	84,000
2 Diesel engine trucks of 10000 kgs each	Other vehicle	12	3150×12×2	75,600
1 Petrol engine truck of 12000 kg	Other vehicle	6	3150×6×1	18,900
2 medium size truck	Other vehicle	9	3150×9×2	56,700
Profit and gains of business or profession				**2,35,200**

Income of the assessee under the head Profits & gains of business or profession shall be ₹ 2,35,200 u/s 44AE.

Question No.11(a):

During the previous year 2010-11, profit and loss account of Shri Amarnath, proprietor of Free Bird Enterprises engaged in the business of dye-made garments, shows profits of ₹ 4,50,000. With the following information, compute his taxable income from business -

(a) Interest on capital ₹ 5,000
(b) Purchases include goods of ₹ 42,000 from his younger brother in cash. However, market value of such goods is ₹ 35,000.
(c) Interest paid outside India ₹ 1,00,000 without deducting tax at source.
(d) Penalty paid to local government for non-filing of sales tax return ₹ 5,000
(e) Penalty paid to customer for non-fulfilling of order within time ₹ 10,000
(f) Bad debts ₹ 1,00,000. Money has been advanced for purchase of Building.
(g) Revenue expenditure on promoting family planning among employees ₹ 10,000.
(h) Premium paid on health of employees ₹ 6,000 in cash
(i) Premium paid on health of his relatives ₹ 6,000 in cheque
(j) Employer's contribution to RPF ₹ 12,000. One-half of the amount is paid after due date as per relevant Act but before 31.3.2010
(k) Employees contribution to RPF ₹ 10,000. ½ of the amount is paid after due date as per relevant Act.
(l) Interest on late payment of sales tax ₹ 1,000 (yet to be paid)
(m) Interest on loan from State Bank of India ₹10,000 (₹ 5,000 is not paid till due date of filing of return)
(n) Interest on late refund from income tax department ₹ 500
(o) He received ₹ 80,000 from a debtor at a time in cash.
(p) Recovery of bad debt ₹10,000 (out of which ₹ 8,000 was allowed as deduction during AY. 2006-07)
(q) Depreciation (being not debited in accounts) ₹ 20,000 allowed as deduction u/s 32

Solution :

Computation of Profits and gains of business or profession of Shri Amarnath for the AY. 2011-12

Particulars	**Note**	**Details**	**Amount**
Net profit as per Profit and Loss account			4,50,000
Add : **Expenditure disallowed but debited in P &L A/c**			
Interest on capital	1	15,000	
Payment to relative in excess of market value of goods	2	7,000	
Interest paid outside India without deducting tax at source	3	1,00,000	
Penalty paid to local government for non-filling of sales tax return	4	5,000	
Bad debt	6	1,00,000	
Premium paid on health of employees in cash	8	6,000	
Premium paid on health of his relatives in cheque	9	6,000	
Employees contribution to RPF	11	5,000	
Interest on loan from State Bank of India	13	5,000	2,49,000
			6,99,000
Less : Expenditure allowed but not debited in P & L A/c			
Depreciation u/s 32		20,000	
Less : Income not taxable but credited to P & L A/c			
Recovery of bad debts	14	2,000	
Less : Income taxable under other head but credited to P & L A/c			

Interest on late refund from income tax department	15	500	22,500
Profits and gains of business or profession			**6,76,500**

Notes :

(1) Interest on capital to proprietor is not allowed as no one can earn from a transaction with himself. The provider of loan and receiver of loan are same hence does not involves any actual expenses.

(2) Any unreasonable payment to relative is disallowed u/s 40A(2). Hence, ₹ 3,000 is disallowed. Since cash payment towards allowed expenditure (i.e. ₹ 19,000) does not exceed ₹ 20,000, hence provision of sec. 40A(3) is not applicable.

(3) Any salary paid outside India without deducting tax at source is disallowed u/s 40(a).

(4) Any payment made for infringement of law is disallowed.

(5) Payment made for non-fulfilling of contract is not a payment for infringement of law Hence, allowed u/s 37(1).

(6) Bad debt is allowed only when such debt has been taken into account as income of previous year or any earlier previous year(s) [Sec. 36(1)(vii)]. Since, the debt is in respect of purchase of a building, which was not considered as income of any previous year, hence it is disallowed.

(7) Any expenditure for promoting family planning is allowed to company assessee [Sec. 36(1)(ix)]. However, such expenditure (revenue in nature) incurred by assessee other than company shall be allowed u/s 37(1).

(8) Payment of insurance premium on health of employees in cheque is allowed u/s 36(1)(ib).

(9) Payment of insurance premium on health of relative is not related to business, hence disallowed.

(10) Employer's contribution towards RPF is allowed if payment is made before due date of filing of return irrespective of fact that such payment was made after due date prescribed in the relevant Act.

(11) Any sum received from employees as their contribution towards RPF is allowed only when such sum has been credited to such fund within the due date prescribed in the relevant Act [Sec. 36(1)(va)].

(12) Interest on late payment of sales tax is not a penalty but compensatory in nature. Hence, it is allowed u/s 37(1) Further such interest is not governed by the provisions of sec. 43B.

(13) Any interest payable to any scheduled bank is allowed on cash basis [Sec. 43B]. Hence, unpaid amount is disallowed.

(14) Bad debt recovery is treated as income in the year of recovery to the extent of bad debt allowed in the earlier year [Sec. 41(4)]

(15) Interest on late refund of income tax is taxable under the head 'Income from other sources'.

(16) Receipt from debtor ₹ 80,000 in cash is not attracted by provision of sec. 40A(3).

Question No.11(b)

X Ltd., carrying on business in manufacture and sale of textiles, showed a net profit of ₹ 10,50,000 in its Profit and Loss Account for the period ending March 31, 2011. On the basis of the following particulars noted from the company's accounts and ascertained on enquiry, compute, giving reasons, the total income of the company for the assessment year 2011-12. The company maintains books of account on the basis of mercantile system.

1. The general reserve account shows a credit of ₹ 2,75,000 under the head "Surplus on devaluation". The enquiries show that the company had exported textile to U.S.A. during the year 1995-96. The sale proceeds were placed in a separate bank account in U.S.A. which were utrlized for import of cotton from time to time After obtaining permission from the Reserve Bank of India, in January 2011 the company remitted to India a sum of ₹ 2 lakh, being the balance standing to its credit in the said bank account which included the above surplus realized on account of devaluation of the rupee in June 1996. The company claims that the said surplus is not taxable, firstly, on the ground that the said surplus did not relate to the previous year and secondly, the said surplus is not a trading receipt.
2. The company had imported automatic looms under a special permission granted by the Textile Commissioner under the Cotton Textile (Control) Order, 1948. One of the conditions laid down while granting the permission was that the company should execute a bond in favour of President of India agreeing to export an agreed quantify of cloth and in default pay a sum calculated at the rate of 10 paise per metre to cover the shortfall. The company fell short of the target during the previous year as a result of

which it was required to pay a sum of ₹ 40,000 towards the shortfall. The company has debited the said amount to "General expenses account".

3. The company has set up a laboratory for conducting research in textile technology. It has incurred a capital expenditure of ₹ 1,00,000 for the said purpose. The amount is shown in the balance sheet us "Laboratory equipment account" but is claimed as deduction in the return of income for the assessment year 2011-12.
4. The interest account includes payments amounting to ₹ 50,000 on deposits made by non-resident buyers of textile manufactured by the company. The said payments were made outside India without deduction of tax.
5. The legal charge includes a sum of ₹ 60,000 paid to solicitors for framing a scheme of amalgamation of all other textile mill with the assessee-company. The scheme is approved by the Central Government in public interest.
6. Travelling expenses include a sum of ₹ 1,25,000 being expenditure incurred by the directors of the company in connection with their tour to USA and UK for the purchase of new machinery for setting up a new plant for manufacture of caustic soda.
7. ₹ 1,00,000 (debited to profit and loss account) is paid to an approved Notional Laboratory with a specific direction that it shall be used for on approved scientific research programme.

Solution :

		₹
Net profit as per Profit and Loss Account		10,50,000
Adiustments :		
Surplus arose on conversion of foreign currency into Indian currency (since foreign currency was kept for purchasing stock-in-trade, it will be revenue receipt)		(+) 2,75,000
Payment of ₹ 40,000 towards the shortfall in export (allowable as deduction since the payment is not penalty)		—
Capital expenditure on scientific research		(–) 1,00,000
Interest to non-residents [not deductible under section 40(a) since payment was made without deducting tax at source]		(+) 50,000
Legal charges for framing amalgamation scheme [deductible u/s 35DD in five years)		(+) 48,000
Travelling expenses of directors [section 37(1) does not permit a deduction of capital expenditure]		(+) 1,25,000
Weighted deduction under section 35(2AA) in respect of ₹ 1,00,000 paid to a National Laboratory [amount deductible is 125% of ₹ 1,00,000,		(–) 25,000
(–) Amount	1,25,000	
Show in P/L A/c	1,00,000	
Expenses not debited earlier	25,000	
Net Income		**14,23,400**

Question No.11 (c):

The depository account shows the following details of M's holdings:

Date of Credit	Particulars	Quantity
10.11.2001	Shares of XYZ LTD.purchased in physical form on 10.11.2001 @ ₹ 20 per share	300
30;11.2002	Purchased dematerialised shares of Y Ltd. on 25.11.2002 @ ₹ 70 per share	500
06.12.2004	Shares of XYZ LTD. held in physical form, were got dematerialised on 01.12.2004	

M sold 600 dematerialised shares on 6th June 2010 @ ₹ 200 per share. Brokerage is paid @2% of sale price. Compute capital gains.

Solution :

(a) Person Liable : The sale of shares held under Dematerialized format with a depository is chargeable to tax as the income of the beneficial owner.

(b) Cost of Acquisition and period of holdings : The cost of acquisition and the period of holding shall be determined on FIFO Method. [Circular No. 768 datd 24.6.1998]

(i) FIFO method will be applied for each account independently.

(ii) When physical stock is dematerilized, the date of credit into the depository account shall be considered for the purpose of FIFO method, but indexed cost of acquisition shall be computed on the basis of year of acquisition.

		₹
Consideration for Transfer		
600 Share @ ₹ 180 per share		1,20,000
Less :	Indexed Cost of Acquisition	(55,671)
	(i) (500 x 70 x 711 / 447)	
	(ii) (100 x 20 x 711/480)	(2,693)
	Long Term Capital Gain	**61,636**

Question No.11(d)

Nisith acquired a property by way of gift from his father in the previous year 1988-89 when its FMV was ₹ 3 lacs. His father had acquired the property during 1981-82 for ₹ 4 lacs. This property was introduced as capital contribution to a partnership firm in which Nisith became a partner on 15.6.2010. The market value of the asset as on that date was ₹ 20 lacs, but it was recorded in the books of account of the firm at ₹ 17 lacs. Is there any capital gain chargeable in the hands of Mr. Nisith?

Solution :

Computation of Capital Gains

		₹
Consideration for Transfer		17,00,000
Less :	Indexed Cost of Acquisition (4,00,000 x 711/191)	17,66,460
	Long Term Capital Loss	**66,460**

(a) Full value of consideration is taken as the value at which it is recorded in the books of accounts of the firm.

(b) Cost of acquisition is taken as cost to the previous owner but indexation has ben done from the date it was first held by the assessee.

(c) Market value of the aset on the date of transfer is not relevant.

Question No.11(e):

PQR & Co. is a partnership firm, consisting 3 partners P, Q and R. the firm is dissolved on 31.12.10. The assets of the firm were distributed to the partners as under :

Particulars	Block of machinery (given to P)	Stock (given to Q)	Land (given to R)
Year of acquisition	1990-91	2002-03	1978-79
Cost of acquisition (₹)	7,20,000	4,00,000	10,000
Market value as on 31.12.10	15,00,000	6,00,000	25,00,000
WDV as on 31.12.10	10,40,000	—	—

Value at which given to partners as per agreement	10,00,000	4,50,000	18,00,000
Market value as on 1.4.81	—	—	2,70,000

Compute the income taxable in the hands of the firm for the assessment year 2011-12. What shall be the cost of acquisition of such assets to the partners of the firm?

Solution :

Computation of Short Term Capital Gains on block of Machinery

		₹
Sale consideration (i.e. the market value)		15,00,000
Less :	Cost of Acquisition (WDV of the block)	10,40,000
	Short Term Capital Gains	**4,60,000**

Income from Business (on transfer of stock)

	₹
Market value of stock	6,00,000
Less : Cost of Acquisition	4,00,000
	2,00,000

Computation of Capital Gains on transfer of Land

		₹
Consideration for transfer		25,00,000
Less :	Indexed cost of Acquisition :	19,19,700
	(2,70,000 x 711/100)	
	Long term capital gains	**5,80,300**

Cost of acquisition of assets to the Partners

		₹
Partner "P"		1,00,000
Partner "Q"		4,50,000
Partner "R"		18,00,000
Less :	Indexed cost of Acquisition :	
	(2,70,000x711/100)	(19,19,700)
Long Term Capital Gains		**4,80,300**

Question No.12 (a):

A firm consists of 3 partners X, Y & Z. Z retires from the firm on 15.10.2009. His capital balance and the profits till the date of retirement stood at ₹ 16 lacs. The firm transferred Its land to Z in settlement of his account. The market value of the land as on that date was ₹ 30 lacs. The land was acquired by the firm on 1.5.93 for ₹ 4 lacs.

Compute the capital gains in the hands of the firm.

Solution:

Computation of Long Term Capital Gains for the A.Y. 2011-12

		₹
Consideration for Transfer		30,00,000
Less :	Indexed Cost of Acquisition (4,00,000 x 711/244)	11,65,574
	Long Term Capital Gains	**18,34,421**

Question No.12 (b):

A holds 15,000 shares (10% of total share holding) in B Ltd. which he had purchased on 10.2.96 for ₹ 6,00,000. The company went into liquidation on 16.7.2010 and paid a sum of ₹ 20 per share in cash and an asset whose market value as on the date of distribution i.e. 5.10.10 was ₹ 18,20,000 to A. the accumulated profits of the company were ₹ 15 lacs.

(a) Compute the income of A for the A.Y. 2011-12 assuming that he has no other income.

(b) Compute the capital gain chargeable to tax if the asset of B Ltd. is sold by A for ₹ 15 lacs on 28.3.11.

Solution :

Computation of Capital Gains of Mr. B for the A.Y. 2011-12

		₹
(a)	(i) Capital Gain on transfer of shares	
	Total consideration (15,000×20+18,20,000)	21,20,000
	Less : Proportionate amount of deemed dividend	
	(10% of ₹ 12,86,353)	(1,28,635)
	Less : Indexed Cost of Acquisition	(15,18,149)
	(6,00,000 x 711 /281)	
	Long Term Capital Gains	**4,73,216**
	(ii) **Income from others Sources**	
	Dividend from Indian Company	Exempted
		4,73,216
(b)	**Capital Gain on transfer of asset (B Ltd.)**	
	Full Value of Consideration	15,00,000
	Less : Cost of Acquisition (being the market value as on the date of distributions)	13,20,000
	Short Term Capital Gains	**1,80,000**
	Accumulated Profits	**15,00,000**

Dividend tax @ 16.60875% (= 15% + 7.5% + 2% Education Cess + 1% SHEC)

Hence, the amount to be distributed plus tax @ 16.60875%

on such amount should be ₹ 15,00,000

Amount of tax = ₹ 2,13,6470

Profits available for distribution = ₹ (15,00,000 – 2,13,647) = ₹ 12,86,353.

Question No 12(c):

Rohit purchased a house in Delhi in December 2004 for ₹ 2,50,000. In March 2010, he entered into an agreement to sell the property to Z for a consideration of ₹ 5,00,000 and received an earnest money of ₹ 50,000. As per the terms of agreement, the balance payment was to be made within 30 days of the agreement. If the intending purchaser does not make the payment within 30 days, the earnest money would be forfeited. As Z could not make the payment within the stipulated time the amount of ₹ 50,000 was forfeited by Rohit. Subsequently, on 16.6.10, Rohit sold the house to Mohit for ₹ 6,00,000. He paid 3% brokerage on sale of the house. Compute capital gains chargeable to tax for the assessment year 2011-12.

Solution :

Computation of Capital Gains for the A.Y. 2011-12

	₹
Consideration for transfer	6,00,000
Less : Expenses on transfer (Brokerage @ 3% on 6,00,000)	18,000
Net Consideration	**5,82,000**

Less : **Indexed Cost of Acquisition**		
Cost of Acquisition	2,50,000	
Less : Amount received and forfeited (u/s 51 to be adjusted against cost)	50,000	
Net Cost of Acquisition	2,00,000	
Indexed Net cost of Acquisition (2,00,000 x 711/480)		2,96,250
Long Term Capital Gains		**2,85,750**

Question No.12(d): On 16th January 2011, Suman sold agricultural land for ₹ 22 lacs. He incurred selling expenses for ₹50,000. Compute capital gains :

If the land sold, was purchased on 1st February 1995 for ₹ 4 lacs, and the land was used for agricultural purposes by his mother. He again purchased agricultural land of ₹ 8 lacs on 25th January 2011. Amount deposited in a scheduled bank under "Capital Gains Deposit Scheme. ₹ 4 lacs on 6th April 2011.

Solution : **Computation of Capital Gains for the A.Y. 2011-12**

	₹
Consideration for transfer	22,00,000
Less : Expenses on transfer	50,000
Net Consideration	**21,50,000**
Less : Indexed Cost of Acquisition (4,00,000 x 711/259)	(10,98,069)
Long-term Capital Gains	10,51,931
Less : **Exemption u/s 54B**	
Cost of New Land purchased	8,00,000
Less : Amount deposited in "Capital Gains Account Scheme" before due date of furnishing return specified u/s 139(1) ₹ 4,00,000 or the balance amount of capital gains, ₹ (10,51,931–8,00,000) = ₹ 2,51,931 whichever is less	2,51,931
Taxable long term Capital Gains	**NIL**

Question No.12 (e)

Anand sold a residential building at Kolkata for ₹ 25,60,000 on 1.11.2010. The building was purchased during 1979-80 for ₹ 1,45,000. FMV as on 1.4.81 ₹ 2,75,000. Brokerage paid on sales @ 2%. deposited ₹ 8 lakhs in NHAI Capital Gains Bond in February 2011. Compute Taxable Capital Gains.

Assessee: Anand

Computation of Taxable Capital Gains for the A.Y. 2011-12

Particulars		**Amount (₹)**
	Consideration for Transfer	25,60,000
Less:	Expenses on Transfer (i.e. Brokerage @ 2% on ₹ 25,60,000)	51,200
	Net Consideration	**25,08,000**
Less:	Indexed Cost of Acquisition = ₹ (2,75,000 × 711/100)	19,55,250
	Long term Capital Gains	**5,52,750**
Less:	Exemption u/s 54 EC Amount invested in NHAI Bonds ₹ 8 lakhs. Deduction restricted upto the balance of LTCG	5,52,750
	Taxable Capital Gains	**Nil**

Question No.12(f)

Bipasha purchased jewellery worth ₹ 2,20,000 during 1985-86. During the year 1990-91, she further purchased jewellery worth ₹ 3,50,000. All the jewellery was sold by her on 15.6.10. The jewellery purchased in 1985-86 was sold for ₹ 20 lacs and that purchased in 1990-91 was sold for ₹ 32 lacs. On 26.6.10 she deposited ₹50 lacs in Capital Gains Scheme account. On 21.10.10 withdrawing from the Deposit Account, she utilised ₹ 48 lacs for purchase of a residential house property in Kolkata. On the date of transfer she owns only one residential house.

Solution :

Computation of Capital Gains for the A.Y. 2011-12

		₹
(a)	**On transfer of jewellery purchased during 85-86**	
	Consideration for transfer	20,00,000
	Less : **Indexed Cost of Acquisition**	
	(2,20,000 x 711/133)	(11,76,090)
	Long-term Capital Gains	**8,23,910**
(b)	**On transfer of jewellery purchased during 1990-91**	
	Consideration for transfer	32,00,000
	Less : **Indexed Cost of Acquisition**	
	(3,50,000 x 711/ 182)	(13,67,308)
	Long term capital gains	**18,32,692**

In order to avail the maximum benefit u/s 54F, the exemption should be computed as follows :

	Total long-term Capital Gain (8,23,910 + 18,32,692)	26,56,602
Less :	Exemption u/s 54F	
		25,54,425
	Taxable Long-term Capital Gains	**1,02,177**

Note :

1. In this case, Bipasha has not fully utilised the deposit account for acquiring a residential house property. Out of ₹ 50 lacs deposited for acquiring the house, it is utilised to the extent ₹ 48 lacs.

Tax treatment of unutilised amount, will be as follows :-

		₹
(a)	Unutilised amount	2,00,000
(b)	Net sale consideration	52,00,000
(c)	Original Capital Gain	26,56,602
(d)	Notional Long-term Capital Gain	1,02,177
(e)	Effective exemption u/s 54F	24,52,248
	[₹ 25,54,425 – 1,02,177]	

₹ 1,02,177 will be chargeable to tax as long-term capital gain after expiry of 3 years from the date of transfer of jewellery (i.e. 15.6.10). Consequently it will be taxable for the assessment year 2014-15.

2. The unutilised amount of ₹ 2 lacs can be utilised by Bipasha at any time after 15.6.10.
3. If Bipasha sells this new house property before 21.10.13, then ₹ 24,52,248 (exemption u/s 54F) will be to tax as long-term capital gain of the year in which the house is sold.
4. If Bipasha purchases another house before 15.6.12 or constructs any other house (income of which is taxable u/s 22) before 15.6.13, then ₹ 24,52,248 (exemption u/s 54F) will be deemed as long-term Capital gain of the year in which another house is purchased or constructed.

Question No.12(g)

P Ltd. owns an industrial undertaking manufacturing chemicals in Bangalore owns the following assets

(a) Plant and machinery (WDV ₹5 lacs) sold for ₹15 lacs.

(b) Building (WDV ₹ 12 lacs) sold for ₹ 60 lacs.

(c) Furniture and fixtures (WDV ₹ 50,000) sold for ₹ 1,80,000

(d) Land cost of acquisition ₹ 5,00,000 during 1984-85 and sold for ₹ 30 lacs

The industrial undertaking was shifted as per policy of the Government from urban area to other area. The new assets acquired during the period 1.1.11 to 31.3.11 are as under:

Plant and machinery ₹ 20 lacs; Buildings ₹ 40 lacs.

Compute capital gain chargeable to tax for the assessment year 2011-12.

Solution :

Short-term Capital Gains on Depreciable assets

			₹
(i)	Plant & Machinery (15,00,000 – 5,00,000)	10,00,000	
(ii)	Buildings (60,00,000 – 12,00,000)	48,00,000	
(iii)	Furniture & Fixtures (1,80,000 – 50,000)	1,30,000	59,30,000
	Long-term Capital Gains on Industrial Land :		
	Consideration for transfer	30,00,000	
	Less : **Indexed Cost of Acquisition**		
	(5,00,000 x 711/125)	28,44,000	2,56,000
	Total Capital Gains		**59,86,000**
	Less : **Exemption u/s 54G**		
	Plant & Machinery	20,00,000	
	Building	40,00,000	
		65,00,000	
	but restricted to ₹ 58,56,000		
	[= ₹ 59,86,000 —1,30,000, being STCG on furniture,		
	not eligible for the purpose of claining exemption u/s 54G		58,56,000
	Short term Capital Gains (on furniture)		**1,30,000**

Question No.13(a)

Mr JK gets the following gifts during the previous year 2010-2011.

	Date of gift	Name of the donor	Amount of gift (₹)
1.	01.07.2008	Gift from R, a friend, by cheque	50,000
2.	01.09.2008	Cash gift from N, nephew	1,00,000
3.	01.12.2008	Gift of diamond ring on his birthday, by a friend, C	75,000
4.	15.12.2008	Cash gifts of ₹ 31,000 each made by four friends on the occasion of his marriage	1,24,000
5.	01.12.2009	Cash gift made by wife's sister on house opening ceremony	51,000
6.	15.01.2009	Cash gift from a close friend of father-in-law.	1,51,000
7.	31.01.2009	Cash gift made by great-grandfather	1,51,000
8.	01.02.2009	Cash gift received under the Will of a friend, who is seriously ill.	51,000

9.	15.02.2009	Cash gift made by a business friend on his birthday	75,000
10.	31.03.2009	Cash gifts made by three friends of ₹ 25,000 each	

Besides this, JK is engaged in the business of sale and purchase of retail goods. He maintains no account books. Gross turnover from retail trading is ₹ 35,00,000. Compute his total income for the assessment year 2011-2012.

Solution : Computation of taxable income for the AY 2011-2012

Particulars	Amount (₹)
1. Income from retail trading business [Sec. 44 AF] 5% ₹ 35,00,000	1,75,000
2. Income from other sources (money gifts):	
(i) Cash gift from a friend, by cheque	50,000
(ii) Cash gift from nephew, not covered by the definition of relative	1,00,000
(iii) Gift of diamond ring — non-monetary gift not taxable	—
(iv) Cash gifts on the occasion of marriage are not chargeable even if such gifts are made by unrelated persons	—
(v) Cash gift made by wife's sister, a relative, not taxable	—
(vi) Cash gift by a friend of father-in-law, unrelated person	1,51,000
(vii) Cash gift made by great-grand father, a relative	—
(viii) Cash gift received under Will in contemplation of death of a friend	—
(ix) Cash gift made by a business friend on his birthday	51,000
(x) Cash gifts, made by three friends, of ₹ 25,000 each	75,000
Total Income	**6,02,000**

Question No.13(b)

The shareholding of Mr K and Mrs K in S Ltd, is given as follows:

(i)	Shareholding of K	7%
(ii)	Shareholding of Mrs K	9%
(iii)	Shareholding of M, brother of K	8%
(iv)	Shareholding of F, father of Mrs K	5%

Mr K and Mrs K are employed with S Ltd. None of them hold technical qualification. Mr K gets salary @ ₹ 10,000 p.m and Mrs K gets @ ₹ 12,000 p.m.

Income from other sources:	₹
Mr K	80,000
Mrs K	1,00,000

Compute Total Income for the assessment year 2011-2012

Solution : **Computation of Total Income for the AY 2011-12**

Particulars	Mr.K	Mrs.K
1. Gross Salary	1,20,000	1,44,000
Salary income of Mr.K to be included in the total income of Mrs.K as her income from other sources is greater and both of them have substantial interest alongwith their relative in s Ltd.		1,20,000
2. Income from other sources	80,000	1,00,000
Total Income	2,00,000	3,64,000

Question No. 13(c): XYZ & Co., a partnership firm, submits the following particulars of its income and carry forward losses for the previous year 2010-2011:

Particulars	Betting on race horses made lawfully (₹)	Betting on race horses made illegally (₹)
1. Gross prize on race horses	15,00,000	5,00,000
2. Expenses incurred:		
(i) Horses purchased during the year	6,00,000	75,000
(ii) Medical expenses	1,00,000	20,000
(iii) Animal trainer fees	50,000	15,000
(iv) Fodder expenses	2,60,000	50,000
(v) Stable-rent/insurance	1,20,000	36,000
(vi) Depreciation in the value of horses	4,60,000	1,50,000
(vii) Staff salaries	1,00,000	40,000
3. Loses brought forward from the assessment year 2009-2010	6,00,000	2,00,000

Solution:

Computation of Total Income for the Assessment Year 2011-12

Particulars	Betting on race horses made lawfully (₹)	Betting on race horses made illegally (₹)
Gross prize		
Less: Expenses incurred:	15,00,000	15,00,000
(i) Horses purchased—not allowed	—	—
(ii) Medical expenses	(-) 1,00,000	(-) 20,000
(iii) Animal trainer fees	(-) 50,000	(-) 15,000
(iv) Fodder expense	(-) 2,60,000	(-) 50,000
(v) Stable rent/insurance	(-) 1,20,000	(-) 36,000
(vi) Staff salaries	(-) 1,00,000	(-) 40,000
(vii) Depreciation in the value of horses—not allowed	—	—
	8,70,000	**3,39,000**
Less: Brought forward loss	6,00,000	Nil
	2,70,000	**3,39,000**

Total income of the firm = (2,70,000 + 3,39,000) = 6,09,000

Note:

"Horse race" means a horse race upon which wagering or betting may be lawfully made [Explanation (b) to Sec. 74A]. Thus, where wagering or betting is not lawfully made on race horses, any loss incurred on such betting can neither be set-off nor carried forward. Hence, the carried forward loss of ₹ 2,00,000 cannot be set-off.

Question No.13(d):

A discloses the following incomes from business or profession for the previous year 2011-2012:

		₹
(i)	Profit from X business	6,00,000
(ii)	Loss from Y business	(-) 2,00,000
(iii)	Loss from profession Z	(-) 2,50,000
(iv)	Profit from speculation business – M	2,00,000
(v)	Loss from speculation business – N	(-) 3,00,000

Determine the income from business or profession for the assessment year 2011-2012

Solution: Income from business-profession for the AY 2011-2012

Particulars	₹
(i) X	6,00,000
(ii) Y	(-) 2,00,000
(iii) Z	(-) 2,50,000
Total Income from Non-Speculation Business and Profession	1,50,000
Income from Speculation Business	
(i) M	2,00,000
(ii) N	(-)3 ,00,000
Loss from speculation business	(-) 1,00,000

Speculation loss cannot be set-off against the income from business profit, though both of them fall under the same head of income.

Thus, taxable business profits for the assessment year 2011-2012 is ₹ 1,50,000. The speculation loss will be carried forward for future set-off for 4 assessment years, immediately succeeding the assessment year for which it was first computed [Sec. 73(4)].

The time-limit of 4 years is applicable from the assessment year 2012-2013 and subsequent year.

Question No.13(e)

Mr. N is employed at a gross salary of ₹ 8,00,000. He gets ₹ 15,000 interest on bank deposit. He has made the following investment/deposit during the year 2010-2011.

		₹
1.	Life insurance premium:	
	(i) Own life, insured for ₹ 80,000	15,000
	(ii) Brother's life, dependent on him	5,000
	(iii) Major son, not dependent on him	4,000
2.	Contribution to unrecognised provident fund	60,000
3.	Contribution to public provident fund	20,000
4.	Contribution to ULIP	5,000
5.	Repayment of loan to SB1 to purchase a residential house: 50% repayment	1,20,000

is towards interest.

6. Infrastucture bonds of an Indian public company under Sec. 80C(2)(xix) 10,000

He has paid education fees for his 3 children:

A	12,000
B	9,000
C	6,000

Besides, interest of ₹ 1,632 on NSC-VIII, (purchased during the year 2008-2009) has been credited on them during the year 2010-2011.

Compute deduction u/s 80C for the assessment year 2011-2012

Computation of Deduction u/s 80C of Mr. N for the assessment year 2011-2012

Particulars	**₹**	**₹**
Deduction in respect of contribution to approved savings (Sec. 80C) :		
1. Life insurance premium;		
(i) Own life-	15,000	
(ii) Brother's life	—	
(iii) Major son	4,000	
2. Contribution to unrecognised provident fund	—	
3. Contribution to ULIP	5,000	
4. Contribution to public provident fund	20,000	
5. Repayment of housing loan to SBI	60,000	
6. Infrastucture bonds of Indian public company [Sec. 80C(xix)]	10,000	
7. Accrued interest on NSC- VIII issue	1,632	
8. Education fees for two children:		
A	12,000	
B	9,000	
	1,33,632	
Deduction restricted upto ₹ 1,00,000		**1,00,000**

Question No.13(f):

Mr. C, manager of L Ltd., has paid ₹ 38,000 during the previous year 2010-2011 by way of medical insurance under GIC approved medical policies. The details are given as below:

(i) For himself. ₹ 6,000

(ii) For Mrs C, a Canadian citizen resident in Toronto and not dependent on him ₹ 5,000

(iii) For B, married son living with him and dependent on him ₹ 3,000

(iv) For D, minor son resident in Toronto and not dependent on him ₹ 3,000

(v) For Mrs B, daughter-in-law, dependent on him ₹ 5,000

(vi) For E, a minor grandson dependent on him ₹ 3,000

(vii) For K, father, 67 years, resident and dependent on him ₹ 3,000

(viii) For M, mother, 66 years, resident in Toronto and dependent on him ₹ 6,000

(ix) For Grandfather, dependent on him, 95 years of age and resident in India ₹ 4,000.

C has earned gross salary of ₹ 2,50,000 during the year and also earns ₹ 95,000 as interest from 7% Capital Investment Bonds, purchased on 31 May 2003. Compute his eligible deduction u/s 80D for the previous year 2010-2011 assuming the following situations:

I. Premium is paid by cheque from his salary income.

II. Premium is paid in cash from his salary income. He holds a valid receipt for cash payment.

III. Premium is paid by cheque out of interest from 7% Capital Investment Bonds, acquired on 31-5-2003.

IV. Premium is paid in cash out of interest from 7% Capital Investment Bonds, acquired on 1-6-2003.

Computation of Deduction for Medical Insurance Premium u/s 80D

Particulars of Medical Insurance premium paid	I ₹	II ₹	III ₹	IV ₹
For himself	6,000	Nil	Nil	Nil
For Mrs. C, a Canadian citizen resident in Toronto and not dependent on him	3,000	Nil	Nil	Nil
For B, married son living with him and dependent on him	2,000	Nil	Nil	Nil
For D, minor son resident in Toronto and not dependent on him	Nil	Nil	Nil	Nil
For Mrs. B, daughter-in-law, dependent on him	Nil	Nil	Nil	Nil
For E a minor grandson, dependent on him	Nil	Nil	Nil	Nil
For K, father, 67 years, resident, a senior citizen and dependent on him	2,000	Nil	Nil	Nil
For M, mother, 66 years, resident in Toronto -not a senior citizen but dependent on him	6,000	Nil	Nil	Nil
For Grandfather, 95 years of age, dependent on him, resident in India, and senior citizen (not a parent, hence not eligible)	Nil	Nil	Nil	Nil
Eligible premium for Deduction u/s 80 D	19,000	Nil	Nil	Nil

Working Notes :

1. Medical insurance premium on spouse's health is always eligible irrespective of whether the spouse is dependent on the assessee or not. The condition of dependency applies only in case of children and parents.
2. Medical premium on health of grandson, grandparents, daughter-in-law or son in-law are not eligible for deduction u/s 80D.
3. Only the premium on health of dependent father will qualify for relaxation as a senior citizen. Since dependent mother is non-resident and, therefore, outside the purview of being a "senior citizen". However, the premium for health of mother will qualify for the normal limit irrespective of the residential status.
4. Any premium paid in cash or by cheque out or exempted income does not quality for deduction u/s 80D.

Question No. 14(a): Maity, a resident individual, furnishes the following particulars of his income/expenditure for the previous year 2010-2011 :

		₹
(i)	Gross salary	3,00,000
(ii)	Income from house property	1,70,000
(iii)	Share of profit from an AOP	25,000
(iv)	Long-term capital gain	50,000

He has paid medical insurance on his life, his wife and his dependent children. Total premium paid under GIC approved policies is ₹ 10,000 but a sum of ₹ 1,000 was paid in cash due to a prolonged bank clearing strike. He has spent ₹ 20,000 on the treatment of his brother, a dependant with disability. He has also deposited ₹ 25,000 with a specified company u/s 2(h) of Unit Trust of India (Transfer of Undertaking and Repeal) Act, 2003 for maintenance of his brother.

He has paid the following donations during the year:

Particulars of donations made during the year	₹
• Donation to P.M.'s National Relief Fund	10,000
• Donation to Jamia Milia University	5,000
• Donation to National Cultural Fund, set up by Central Government	5,000
• Donation to Delhi Municipal Corporation for Family Planning	12,000
• Donation to Birla Temple (notified)	
• for repair and renovation of the temple	2,000
• for religious ceremonies, prasad, etc. for the benefit of devotees in general	5,000
• Donation to a temple managed by the Residents Welfare Association for its much needed repair and maintenance. The Association is a non-profit entity registered with the Registrar of Societies.	5,000
• Following donations to Pt. Pyare Lai Charitable Trust recognised by the Commissioner u/s 80G(5)(vi).	
(i) Donation in form of equity shares of blue chip companies: The shares were sold by the Trust at their market value of ₹ 75,000 and used wholly towards its charitable objectives. However, shares were transferred at cost,	25,000
(ii) Donation paid in cash,	5,000
(iii) Donation made by cheque,	7,000
(iv) 50 blankets costing ₹ 100 each.	5,000
• Donation made to Indian Olympic Association 80G(2)(c) paid by a/c payee cheque,	7,500
• Donation for developing low cost homes for slum-dwellers, paid	
(i) Delhi Development Authority, and	3,000
(ii) Delhi Slum-dwellers Rehabilitation Society duly registered with the Registrar,	2,500
• The Rajiv Gandhi Foundation	6,000
• National Children's Fund	3,000

Mr Maity borrowed a sum of ₹ 2,00,000 in 2003 @ 9% interest from Harsh Vardhan Charitable Trust (registered under Sec. 80G) to complete his B.Tech. Degree from Nalanda University. In March 2010, he repaid a sum of ₹ 75,000 (including ₹ 20,000 interest) to the said trust.

Compute his total income for the assessment year 2011-2012.

Solution:

Computation of Total Income of Mr. Maity for the Assessment Year 2011-2012

Particulars	₹	₹
1. Income from salary		3,00,000
2. Income from house property		1,70,000
3. Share of profits from an AOP : Exempt (Sec. 86)		Nil
4. Long-term capital gains		50,000
Gross total income		**5,20,000**
5. Deduction from gross total income :		

(i) Medical insurance premium (Sec. 80D)	9,000	
(ii) Expenditure on medical treatment and deposit for maintenance of a handicapped dependent relative (Sec. 80DD) :	50,000	
(iii) Repayment of interest on loan for higher studies (Sec. 80E) (No deduction is allowed for repayment of principal amount of educational loan w.e.f. A.Y. 2008-2009)	20,000	
	79,000	
(iv) Charitable donations Sec. 80G – [See Note below]	42,500	**1,21,500**
Total Income		**3,89,500**

Working Note :

	₹	₹
Goss Total Income		5,20,000
Less : Aggregate of :		
(i) Share of profit in AOP entitled to rebate u/s 86.	Nil	
(ii) Any amount qualifying for deduction from GTI exempt for deduction for donation u/s 80G itself.	79,000	
(iii) Long-term capital gain	50,000	
(iv) Any to a NRI from dividend and interest etc. on foreign currency investment referred to u/s 115A, 115AB, 115AC, 115ACA, 115AD.	Nil	
	1,29,000	1,29,000
Adjusted Gross Total Income		**3,91,000**

Computation of Deduction for Donations u/s 80G

	₹	₹
A. Donations not subject to qualifying amount, eligible for deduction @ 100% of the amount donated :		
(i) Donation to P.M.'s National Relief Fund	10,000	
(ii) Donation to National Cultural Fund, set up by Central Government	5,000	15,000
B. Donation not subject to qualifying amount, eligible for deduction @ 50% of the amount donated :		
(i) The Rajiv Gandhi Foundation	6,000	
(ii) National Children's Fund	3,000	
Only 50% of the amount of donation available as deduction	9,000	4,500
C. Donation subject to qualifying amount :		
(i) Donation to Delhi Municipal Corporation for Family Planning	12,000	
(ii) Donation made to Indian Olympic Association 80G (2)(C) (available only to a company assessee)	Nil	
(iii) Donation to Jamia Milia University	5,000	
(iv) Donation to Birla Temple (notified) for repair and renovation of the temple.	2,000	
(v) Monetary donation to Pt. Pyare Lal Charitable Trust recognised		

by the Commissioner u/s 80G (5) (vi).	12,000	
(vi) Donation to Delhi Development Authority	3,000	
Aggregate of donations subject to qualifying amount	**34,000**	

Qualifying amount :

Lower of the following :

(a) 10% of Adjusted Gross Total Income, i.e. 39,100, or

(b) Aggregate of donations, 34,000

Whichever is less, is qualifying amount = 34,000		
100% of ₹ 12,000 out of the QA of 34,000	12,000	
50% of the balance of the QA i.e. 50% of (34,000-12,000)	11,000	23,000
Total deduction for donations u/s 80G		**42,500**

1. Medical Insurance Premium paid in cash is not allowable as a deduction.
2. Donation to a notified temple is allowed only if it is towards its repairs or maintenance and not otherwise.
3. Only donations paid in monetary terms that is, either in cash or by cheque are eligible for deduction. Conversion of donations in kind into cash by the donee or mere possibility of their conversion is immaterial.

Question No.14 (b): Mr Jamal, a resident assessee, runs a manufacturing business in Delhi. For the previous year 2010-2011, he disclosed his taxable income as below:

	₹
Business profits	2,55,000
Long-term capital gains	25,000
Short-term capital gain	15,000

He has hired furnished accommodation for his own use and pays ₹ 4,000 p.m. He has paid donation amounting to ₹10,000 to National Defence Fund. He has deposited ₹ 50,000 under a scheme framed by the Life Insurance Corporation for maintenance of his dependant brother with a disability. The disability is certified by the medical authority. Compute his total income for the assessment year 2011-2012.

Solution:

Computation of total income of Mr Jamal — Assessment Year 2011-2012

Particulars	₹	₹
Income from business (computed)		2,55,000
Long-term capital gain (computed)		25,000
Short-term capital gain (computed)		15,000
Gross Total Income		**2,95,000**
Deductions from gross total income:		
(i) Deposit for maintenance of a dependent with disability [Sec. 80DD]:	50,000	
(ii) Charitable donations to National Defence Fund [Sec. 80G]:		
Amount of Deduction @ 100% of ₹ 10,000	10,000	
	60,000	
(iii) Expenditure incurred on rent [Sec. 80GG] [W.N.1]	17,000	77,000
Total income		**2,18,000**

Workings Note 1:

Particulars	₹	₹
Expenditure incurred on rent [Sec. 80GG]:		
• [Rent paid -10% of ATI], i.e. 48,000 -21,000 = 17,000, or		
• 25% of AGTI, i.e. 25% of 2,10,000 = 52,500, or		
• ₹ 2,000 p.m. = ₹ 24,000		
whichever is less, is to be deducted, i.e. ₹ 17,000		
Adjusted Total Income for Sec. 80GG:		
Gross total income		
Less: Aggregate of		2,95,000
(i) All permissible deduction from GTI except for deduction for u/s 80GG	60,000	
(ii) Any long-term capital gain	25,000	85,000
Adjusted Gross Total Income [AGTI] for Sec. 80GG		**2,10,000**

Question No.14(c) M, resident in India, furnishes the following particulars of his receipts and outgoings during the previous year 2010-2011.

		₹
Receipts:		
(i)	Income from salary	2,00,000
(ii)	Income from house property	3,00,000
(iii)	Gross winning from crossword puzzle	3,50,000
Payments:		
(i)	Contribution to LIC annuity plan	15,000
(ii)	Medical insurance premium:	
(a)	For himself	4,000
(b)	His wife, not dependent	3,000
(c)	Mother, non-resident, 67 years, dependent	5,000
(d)	Nephew, wholly dependent with disability	3,000
(e)	Grandson, dependent	2,000
(iii)	Expenditure on medical treatment and maintenance of the nephew referred to	30,000
(iv)	Medical treatment for grandson, suffering from a disease specified under income-tax rules(v)	50,000
(v)	Donation to Gujarat government for family planning	50,000
(vi)	Scholarship to a poor but meritorious student	20,000
(vii)	Contribution to approved scientific research association	30,000
(viii)	Contribution to Delhi Municipal Corporation for sewage scheme for slum-dwellers, approved by National Committee	50,000
(ix)	Donation to Political party paid during November 2010 assembly elections	
	Compute his total income for the assessment year 2011-2012. Make necessary assumptions and clarify them.	20,000

Solution:

Computation of Total Income for AY 2011-2012

Particulars	₹	₹
Income from salary		2,00,000
Income from house property		3,00,000
Gross winnings from crossword puzzle		3,50,000
Gross Total Income		**8,50,000**

Less: Deductions under Chapter VIA :			
Contribution to LIC annuity plan [Sec. 80CCC]		10,000	
Medical insurance premium [Sec, 80D]			
Self	4,000		
His wife	3,000		
Mother, 67 years old	5,000		
Nephew dependent with disability	x		
Grand son	x	**12,000**	
Maintenance and medical treatment of a dependent with disability [Sec. 80DD]			
Expenditure for medical treatment of grandson [Sec. 80DDB]		Nil	
Donations for scientific research or rural development [Sec. 80-GGA]			
(a) Donation to approved scientific research association		30,000	
(b) Contribution to MCD for slum-dwellers scheme, approved by National Committee		50,000	
Donations to political party [Sec. 80GGC w.e.f. 22.9.2004]		20,000	
Charitable donations [Sec. 80G]			
(a) Scholarship to a poor meritorious student		xxx	
(b) Gujarat government for family planning: 100% of qualifying amount			
1. Actual donation = 50,000, or			
2. 10% of specified GT1 = 37,800			
8,50,000 – (3,50,000 + 10,000 + 12,000 + 30,000 + 50,000 + 20,000) = ₹3,78,000			
whichever is less, is QA 37,800= 100% of 37,800		37,800	1,59,800
Total Income			**6,90,200**

Previous year	**Particulars**	**X**	**Y**
2005-2006	Business profits or loss before depreciation	(–) 6,00,000	14,00,000
	Depreciation	4,00,000	2,00,000
2006-2007	Business profits or loss before depreciation	5,00,000	2,00,000
	Depreciation	4,00,000	1,00,000
2008-2009	Business profits or loss before depreciation	8,00,000	10,00,000
	Depreciation	4,00,000	2,00,000
2009-2010	Business profits or loss before depreciation	28,00,000	12,00,000
	Depreciation	4,00,000	6,00,000

Compute the amount of deduction for X u/s 80-IA and total income of C Ltd. for all four previous years.

Computation of deduction u/s 80-IA for undertaking X

Particulars	**2005-2006**	**2006-2007**	**2007-2008**	**2009-2010**
Profits or loss before depreciation	(-) 6,00,000	5,00,000	8,00,000	28,00,000
Less: Depreciation		(-) 4,00,000	(-) 4,00,000	(-) 4,00,000
	6,00,000	**1,00,000**	**4,00,000**	**24,00,000**
Set-off of carry forward business loss		(-) 1,00,000	(-) 4,00,000	(-) 1,00,000
Set-off of carry forward depreciation		xxx	xxx	(-) 4,00,000
Profits eligible for deduction u/s 80-IA	Nil	Nil	Nil	19,00,000
Amount of deduction @ 100% of profits	**Nil**	**Nil**	**Nil**	**19,00,000**

Computation of profits of undertaking Y and total income of C Ltd.

Particulars	2005-2006	2006-2007	2007-2009	2009-2010
Profits or loss before depreciation:	14,00,000	2,00,000	10,00,000	12,00,000
Less: Depreciation of Y	(-) 2,00,000	(-) 1,00,000	(-) 2,00,000	(-) 6,00,000
	12,00,000	1,00,000	8,00,000	6,00,000
Profits of X after depreciation	Nil	1,00,000	4,00,000	24,00,000
Set-off of business loss of X	(-) 6,00,000			
Set-off of unabsorbed depreciation of X	(-) 4,00,000			
Gross Total Income	**2,00,000**	**2,00,000**	**12,00,000**	**30,00,000**
Less: Deduction u/s 80-IA	Nil	Nil	Nil	19,00,000
Total income of C Ltd.	**2,00,000**	**2,00,000**	**12,00,000**	**11,00,000**

Note: 1.

Even though the business loss and unabsorbed depreciation of X were set-off during the PY 2006-2007 itself in computation of total income of C Ltd., for the purpose of deduction u/s 80-IA, they will still be carried forward on notional basis and set-off only against the profits of business eligible u/s 80-IA.

Question No.14 (d) : SK Industries, a diversified group, discloses profit from the following sources for the previous year 2010-2011 :

		(₹ in lakhs)
(i)	Profits from small-scale unit, started in 2001-2002	6.00
(ii)	Profit from industrial undertaking 2002-2003, in Vidisha, a B-class industrially backward district.	10.00
(iii)	Profit from multiplex theatre, started in 2006-2007	
	(a) Delhi	4.00
	(b) Allahabad	2.00
(iv)	Profits from convention centre, started in 2007-2009	
	(a) Delhi	5.00
	(b) Allahabad	3.00
(v)	Profits from Hill View, a hotel started in 2002-2003 at Manali in Himachal Pradesh. Hotel is approved by prescribed authority	10.00
(vi)	Profits from undertakings engaged in refining of mineral oil since 1 January 2004 in Uttar Pradesh, not listed in backward state in Eighth Schedule.	10.00

Compute the total income for the assessment year 2011-2012.

Computation of Total Income

	Particulars	(₹ lakhs)	(₹ lakhs)
(i)	Profits from SSI		6.00
(ii)	Profits from undertaking located in industrially backward B-class district		10.00
(iii)	Profits from multiplex theatre: (4 + 2) =		6.00
(iv)	Profits from convention centre : (5+3) =		3.00
(v)	Profits from Hill View Hotel		10.00

(vi) Profits from refining undertaking		10.00
Gross Total Income		**50.00**
Less : Deduction in respect of profits and gains from certain industrial undertaking, other than infrastructure undertakings (Sec. 80-IB) :		
1. Profits from SSI [Sec. 80-IB (3)] : 25% of ₹ 6 Lakh :	1.50	
2. Profits from undertaking in B-class industrially backward district [Sec. 80-IB (4)] 25% of ₹ 10 lakh	2.50	
3. Profits from multiplex theatre [Sec. 80-IB(7A) 50% of ₹ 2 lakh (No deduction for Delhi)	1.00	
4. Profits from convention centre [Sec. 80-IB(7B)] 50% of ₹ 8 lakh	4.00	
5. Profits from Hill View Hotel [Sec. 80-IB(7)] Allowed only for Indian company	Nil	
6. Profits from refining undertaking [Sec. 80-IB(9)]-100% of profits for 7 assessment years	10.00	**19.00**
Total Income		**31.00**

Question No.14(e): Evergreen Construction (P) Ltd. has earned profits during the PY 2010-2011 from construction and sale of f lats under three housing projects, developed at Rajarhat, Kolkata, details of which are given below:

		(₹ in lakhs)
(a)	Profits from construction and sale of flats, built up on a plot of 1.5 acres, built up area of the flat 1400 sq feet, located 30 km from Kolkata.	80.00
(b)	Profits from construction and sale of flats, built up on a plot of 1 acre, built up area 1050 sq feet, located within 25 km from Delhi.	60.00
(c)	Profits from construction and sale of flats, built on a plot of 0.90 acre, built up area 1000 sq feet, located 35 km from Kolkata.	40.00

The housing projects have been approved by the Kolkata Industrial Development Authority in the year 1 April 2006. Compute its total income for the previous year 2010-2011 relevant for the AY 2011-2012. Would your answer be different in the following cases:

(i) The housing projects were not approved.

(ii) The housing project is carried out in accordance with a scheme approved by West Bengal Government for redevelopment of buildings in slum areas.

(iii) The company was engaged only in the sale of flats and not developing and building the housing project.

Computation of Total Income for the AY 2011-2012

Particulars	**(₹ in lakh)**	**(₹ in lakh)**
Profits from Project (a)		80.00
Profits from Project (b)		60.00
Profits from Project (c)		40.00
Less :		180.00
Deductions from profits and gains from certain industrial undertaking other than infrastructure undertaking (Sec. 80-IB):		
(i) Profits from Housing Project (a) are fully deductible as the size of flat not exceeding the prescribed area 1500 sq feet.	80.00	

(ii) Profits from Housing Project (b) not deductible as the area of the flat exceeds the prescribed area of 1000 sq feet.	x	
(iii) Profits from Housing Project (c) not deductible as the size of the Housing plot is less than 1 acre.	x	(–) 80.00
Total income		**100.00**

Question No.14(f) : Mekon Ltd., an Indian company, starts an industrial undertaking on 1 April 2010. During the previous year, it earns profits of ₹ 80 lakh before allowing any deduction for wages. Compute its total income for the previous year 2010-2011 taking into account the following employment schedules of workers:

Date of employment	Number of workers	Status of workers	Rate of wages
1-5-2010	90	Casual	300 p.m.
1-6-2010	20	Reuglar	4000 p.m.
1-7-2010	10	Regular	4000 p.m.

Solution:

Computation of total income for the AY 2011-2012

Particulars	₹	₹
Profits before allowing deduction for wages		80,00,000
Less: Wages paid to workers [Sec. 37(1)] :		
(i) 90 × ₹ 3000 × 11	29,70,000	
(ii) 20 × ₹ 4000 × 10	8,00,000	
(iii) 10 × ₹4000 × 9	3,60,000	(-) 41,30,000
Business Profits and Gross Total Income		**38,70,000**
Less: Deduction in respect of employment of new workmen [Sec. 80 JJAA] 30% (₹ .4000 x 10 x 10)		(-) 1,20,000
Total Income		**37,50,000**

Question No.14(g): Mr. R has developed an improved economical model of a motor cycle and got it patented on 31-3-2010 under the Patent Act, 1970. He allowed Z Ltd. to use his patent rights and licenses has been granted to it under the Patent Act, 1970. He has received royalty of ₹ 8,00,000 during the previous year 2010-2011. However, the royalty in accordance with the terms and conditions of the license settled by the Controllers under the said Act is ₹ 2,80,000. He has incurred ₹ 1,00,000 expenses in developing his invention and getting it patented.

Compute his total income for the assessment year 2011-2012 (i) if he is resident in India, (ii) non-resident India.

Computation of Total Income for the Assessment Year 2011-2012

Particulars	(i) ₹	(ii) ₹
Income from other sources	8,00,000	8,00,000
Less : Expenses	1,00,000	1,00,000
Gross Total Income (GTI)	7,00,000	7,00,000
Less : Deduction for respect of royalty on patent (Sec. 80-RRB)		
Least of the followings:		
(a) Income from royalty 5,00,000; or		
(b) Royalty under the terms of license settled by the Controller 2,80,000;		
(c) Maximum limit ₹ 3,00,000		
Whichever is less, is to be deducted	2,80,000	xxx
Total Income	**4,20,000**	**7,00,000**

Question No.14(h) : Mr. J is suffering with 60% locomotor disability which is certified by medical authority. He is employed as Technical Supervisor with Air Tel at a salary of ₹ 20,000 p.m.

	Particulars	₹
(i)	Income from government securities	20,000
(ii)	Long-term capital loss	(-) 40,000
(iii)	Short-term capital gain (Sec. 111A)	1,00,000
(iv)	Insurance commission (gross)	1,00,000
(v)	Interest on Saving Fund a/c from bank	10,000

He has incurred the following expenses:

(i)	Medical insurance paid by cheque for his father, resident in India and 70 years	18,000
(ii)	Deposit with LIC for maintenance of father, mainly dependant on him for support and maintenance and suffering from low-vision with a severe disability of 80%, as per certificate of the medical authority	
(iii)	Rent paid for the year 2010-2011 for accommodation hired by him.	40,000

Compute his total income for the assessment year 2011-2012.

Solution:

Computation of Total Income for the Assessment Year 2011-2012

Particulars	**₹**	**₹**
1. Income from salaries		2,40,000
2. Income from capital gains :		
(a) Short-term capital gains (Sec. 111A)		
(b) Long-term capital loss to be carried forward		1,00,000
3. Income from others sources :		Nil
(a) Interest government securities	20,000	
(b) Interest on savings fund a/c with Bank	10,000	
(c) Insurance commission	1,00,000	1,30,000
Gross Total income		**4,70,000**
Less : Deductions under Chapter VIA:		
Medical insurance (Sec. 80D)	18,000	
Deduction in respect of maintenance including medical treatment of a department, a person with severe disability (Sec. 80DD)	1,00,000	
Deduction in case of a person with disability (Sec. 80U) :	50,000	
Deduction u/s 80GG :(Least of the followings)		
(a) (i) Rent paid less 10% of Adjusted Gross Total Income = 40,000-23,300 = 16,700,		
(b) (ii) 25% of 2,33,000 Adjusted Gross Total Income=58,250,		
(iii) 2,000 p.m. × 12 = 24,000	16,700	**1,84,700**
Whichever is less, is or be deducted		
Total income		**2,85,300**

Question No.15(a)

M, an individual, retired from the services of a Company on 31.10.2010. He joined another employer on 1.11.2010 and was in service till end of March 2011, when he furnishes the following details and information —

1. Salary and Allowances for the period

From First Employer	₹ Per month
Basic Salary	30,000
Dearness Allowance	16,000
Conveyance Allowance	6,000
From Second Employer	₹ Per month
Basic Salary	35,000
Fixed Conveyance Allowance	8,000

2. While he was with the first employer, M contributed 10% of his basic salary to a Provident Fund Account with the Regional Provident Fund Commissioner. He did not become a member of the Provident Fund maintained by the second employer.
3. M was permitted by the second employer to encash 15 days leave he had accumulated during his service and received ₹ 12,500 from his employer.
4. M had constructed a residential house in Chennai in February 2007 for ₹30 Lakhs. Part of the costs of construction was met by borrowals of ₹ 20 lakhs from the Housing Development Corporation, at interest of 12.5% p.a. The loan was taken on June 2005. The loan outstanding at the beginning of the current year was ₹12,00,000. The rate of interest applicable for the current year was reduced to 9% p.a. due to reduction in rates. [He had also borrowed from some relatives ₹4,00,000 on which interest at 15% p.a. was due.] The property had been let-out soon after completion.
5. In the Assessment Year 2007-08, M was allowed a deduction of ₹50,000 for irrecoverable rents. The annual value decided by the Corporation of Chennai for the property is ₹ 80,000. The property was let-out in the current year to a Company on a rent of ₹20,000 p.m. The half-yearly municipal taxes on the property were fixed by the Corporation of Chennai only in August 2010 at ₹15,000 for every half year from 1.4.2007. M paid the taxes due in September 2010 upto the half-year ending 31.3.2010.
6. M also received from the previous tenant ₹ 40,000 (out of the dues of ₹ 50,000).
7. After retirement from the first employer, M received ₹ 4,50,000 from the Regional Provident Fund Commissioner, money was fully invested by him in the 15% Non-Redeemable Debentures issued by the Indian Oil Corporation interest on these had not come in by the end of March 2011.
8. M received interest of ₹ 60,000 on long-term fixed deposits with Banks, ₹ 25,000 as interest on Post Office Savings Bank Accounts and ₹ 20,000 as income from units.
9. M owns a car which is used for office purposes also and it is found that the entire conveyance allowance from his employer had been fully spent on travel for official purposes.
10. One of the policies of insurance taken by M had matured for payment and ₹ 8,00,000 received by him in June 2010 from the LIC was invested by him, in the name of his 16-year old son, in fixed deposits with companies. Interest received upto 31.3.2011 on these deposits was ₹ 90,000. On one of the continuing policies of insurance, M paid a premium of ₹ 60,000 in the year.

Compute M's total income for the Assessment Year 2011-12.

Solution :

Assessee : Mr. M | **Previous Year : 2010-11** | **Assessment Year : 2011-12**

Computation of Total Income

			₹	₹	₹
Income under the head Salaries					
From First Employer					
	Basic Pay	(₹ 30,000 x 7)		2,10,000	
	Dearness Allowance	(₹ 16,000 x 7)		1,12,000	
	Conveyance Allowance	(₹ 6000 x 7)	42,000		
Less:	Exempt u/s 10(14)		(42,000)	Nil	3,22,000

	Amount received from Regional Provident Fund Commissioner	4,50,000		
Less:	Exempt u/s 10(12)	(4,50,000)	Nil	
From Second Employer				
	Basic Salary (₹ 35,000 x 5)		1,75,000	
	Conveyance Allowance (₹ 8,000 x 5)	40,000		
Less:	Exempt u/s 10(14) (incurred for official performance of duties)	(40,000)	Nil	
	Leave Encashment - Fully taxable while in service		12,500	1,87,500
	Gross Income from Salary			**5,09,500**
Income from House Property :				
	Gross Annual Value u/s. 23(1) — Higher of Municipal Value of ₹80,000 or Actual Rent of ₹ 2,40,000		2,40,000	
Less:	Municipal Taxes paid during the year @ ₹ 15,000 for every half year from 1.4.2007 upto 31.3.2010 (Current Year - Not Paid)		(90,000)	
	Net Annual Value (NAV)		1,50,000	
Less:	Deduction			
	@ 30% of NAV u/s 24(a)		(45,000)	
	Interest on Borrowed Capital u/s 24(b)			
	Loan from Housing Development Corporation:			
	Current Period Interest: ₹12,00,000 × 9%	1,08,000		
	Prior Period Interest (Interest upto 31.3.2006) [(₹20,00,000 × 12.5%) + (4,00,000 × 15%)] × 10/12 × 1/5	51,667		
	Loan from Relative - Current Period Interest (₹ 4,00,000 x 15%)	60,000	(2,19,667)	
Add:	Unrealised Rent recovered (taxable in the year of recovery u/s 25AA]		40,000	**(74,667)**
Income from Other Sources				
	Interest on Long-term Fixed Deposits with Bank		60,000	
	Interest on Post Office Savings Bank A/c	25,000		
Less:	Exempt u/s 10(15)	(25,000)	Nil	
	Income from Units of UTI	20,000		
Less:	Exempt u/s. 10(35)	(20,000)	Nil	
	LIC Policy matured	8,00,000		
Less:	Exempt u/s. 10(1D)	(8,00,000)	Nil	
	Interest from Fixed Deposits with Companies in the name of minor son	90,000		
Less:	Exemption u/s. 10(32)	(1,500)	88,500	1,48,500
	Gross Total Income			**5,83,333**
Less:	Deduction under Chapter VI–A–			
	u/s 80C –LIC Premium		(60,000)	
	– RPF – 10% of ₹ 1,40,000		(14,000)	74,000
	Total Income			**5,09,333**
	Total Income (Rounded Off u/s 288A)			**5,09,330**

Assumptions :

1. It is presumed that Mr. M accounts for his interest income on receipt basis.

2. Assumed that there has been no repayment of Housing Loan Principal during the year ending 31.3.2006 for the purpose of calculation of prior period interest.
3. Recognised Provident Fund received on retirement shall not be taxable u/s 10 (assuming conditions are satisfied).
4. **Unrealised Rent recovered :** Since the assessee has been allowed a deduction of ₹ 50,000 from his house property income in ealier years in respect of Unrealised Rent, entire ₹ 40,000 recovered during current year becomes taxable.
5. **Deduction of Interest** u/s 24 shall be allowed even if the amount is borrowed from any person other than the Banks/Financial Institutions in respect of Let Out property.

Question No.15(b)

Mr. A, a Senior Citizen, has furnished the following particulars relating to his House Properties —

Particulars	House I —₹	House II —₹
Nature of Occupation	Self Occupied	Let-out
Municipal Valuation	60,000	1,20,000
Fair Rent	90,000	1,50,000
Standard Rent	75,000	1,40,000
Actual Rent per month	—	12,000
Municipal Taxes paid	6,000	12,000
Interest on Capital borrowed	90,000	80,000

Loan for both Houses were taken on 1.4.2006. House II remained vacant for 4 months.

Besides the above two house, A has inherited during the year 1988-89 an old house from his grandfather. Due to business commitments, he sold the house immediately for a sum of ₹ 250 Lakhs. The house was purchased in 1962 by his grandfather for a sum of ₹ 2 Lakhs. However, the Fair Market Value as on 1.4.1981 was ₹ 30 Lakhs. With the sale proceeds, A purchased a new house in March 2010 for a sum of ₹ 140 Lakhs and the balance was used in his business.

The other income particulars of Mr. A besides the above are as follows (AY 2011–2012) —

- Business Loss ₹ 12 Lakhs
- Income from Other Sources (Bank Interest) ₹ 1 Lakh
- Investments made during the year PF ₹ 70,000
- ICICI Infrastructure Bond Purchased (u/s 80CCF) ₹ 30,000

Compute Total Income of Mr. A and his Tax Liability for the Assessment Year 2011–2012

Solution :

Assessee : Mr. A | **Previous Year : 2010-11** | **Assessment Year : 2011-12**

Computation of Total Income

	Particulars	₹	₹	₹
1. Income from House Property :				
(a)	**House I :** Self Occupied — Annual Value u/s 23(2)	Nil		
	Less : Deduction u/s 24(b) = Interest on Housing Loan			
	taken on 1.4.2006 (Note 1)	90,000	(90,000)	
(b)	**House II :** Let-out – (Note 2)		(21,000)	(1,11,200)
2. Profits and Gains of Business or Profession – Loss				(12,00,000)
3. Capital Gains — Sale of Residential House Property — Long Term Asset				
	Sale Consideration		2,50,00,000	
	Less : Expenses on Transfer		Nil	

	Net Consideration	2,50,00,000	
Less :	Indexed Cost of Acquisition — Fair Market Value as on 1.4.81 × CII of year of Sale /CII of year of first holding (₹ 20 Lakhs × 711/161)	83,32,298	
	Long Term Capital Gain	1,61,67,702	
Less :	Exemption u/s 54 — New House purchased	1,40,00,000	21,67,702
4. Income from Other Sources :	Bank Interest		1,00,000
	Gross Total Income		**9,56,502**
Less :	Deduction under Chapter VI-A		
	u/s 80C – Deposits in PPF	70,000	
	u/s 80 CCF – Investments in Long-term Infrastructure Bonds ₹ 30,000 (restricted upto a maximum of ₹ 20,000)	20,000	90,000
	Total Income		**8,66,502**

Tax on total Income of ₹ 8,66,502

(i)	Other Income included in Total Income = Income from other sources – Deduction under Chapter VIA = 1,00,000 – 90,000 = 10,000	
	Tax on ₹ 10,000	Nil
(ii)	Balance of LTCG (after adjusting loss from House Property + Business loss) included in Total Income = (21,67,702 – 1,11,200 – 12,00,000) = 8,56,502	
	Tax on LTCG	1,27,100
	= 20% [LTCG – Unavailed Basic Exemption limit] = 20% [LTCG – (Basic Exemption limit – Other Income)] = 20% [8,65,502 – (2,40,000 – 10,000)] = 20% [8,65,502 – 2,30,000] = 20% of 6,35,502	
	(+) EC @ 2%	2,542
	(+) SHEC @ 1%	1,271
	Tax Payable	1,30,913
	Tax Payable (Rounded off u/s 288B)	1,30,910

Notes :

1. It is assumed that the construction of the house was completed **within 3 years** from the end of the financial year in which the loan was taken.
2. **Annual Value of House Property II** is computed as under —

(i)	Municipal Value (MV)	1,20,000
(ii)	Fair Rental Value (FRV)	1,50,000
(iii)	Higher of MV + FRV	1,50,000
(iv)	Standard Rent	1,40,000
(v)	Reasonable Expected Rent (RER) [lower of (iii) + (iv)]	1,40,000
(vi)	Annual Rent @ ₹ 12,000 pm	1,44,000
(vii)	Unrealised Rent	Nil

(viii)	Actual Rent [(vi) – (vii)]	1,44,000
(ix)	Vacancy Allowance	48,000
(x)	Gross Annual Value [(viii) – (ix)]	96,000
	Less : Municipal Tax paid	12,000
	Net Annual Value (NAV)	**84,000**
	Less : Standard deduction @ 30% of NAV u/s 24(a)	25,000
	Less : Interest on borrowed Capital u/s 24(b)	80,000
	Income for House II	**(21,200)**

3. **Loss of ₹ 3,18,000** under the head Income from House Property and Business Income has been fully set off against Long Term Capital Gain, since it is beneficial to the assessee.
4. Since Mr. A is liable to tax **only because of LTCG,** Tax on Total Income shall be computed as = 20% (Total Income – Basic Exemption Limit) = 20% (1,26,82,000 – 2,40,000).

Question No.15(c)

Mr Ashok a senior citizen, owns a property consisting of two blocks of identical size. The first block is used for business purposes. The other block has been let out from 14.2010 to his cousin for ₹ 20000 p.m. The cost of construction of each block is ₹ 5 lacs (fully met from bank loan), rate of interest on bank loan is 10% p.a. The construction was completed on 31.3.2010. During the year ended 31.3.2011, he had to pay a penal interest of ₹ 2000 in respect of each block on account of delayed payments to the bank for the borrowings. The normal interest paid by him in respect of each block was ₹ 42,000. Principal repayment for each block was ₹ 23,000 An identical block in the same neighborhood fetches a rent of ₹25,000 per month Municipal Tax paid in respect of each block was ₹ 12,000.

The income from business prior to adjustment towards depreciation on any asset is ₹ 2,20,000. He follows Mercantile system of accounting. Depreciation on equipments used for business is ₹ 30,000.

On 23.2.2011, he sold shares of B Ltd., a listed share in BSE for ₹ 2,30,000. The share had been purchased 10 months back for ₹ 1,80,000. Security transaction tax paid may be taken as ₹ 220.

Brought forward business loss of a business discontinued on 12.1.2009 is ₹ 90,000. This loss has been determined in pursuance of a return of income filed in time and the current year is the seventh year.

The following payments were effected by him during the year :

1. LIP of ₹ 20,000 on his life and ₹ 12,000 for his son aged 22, engaged as a software engineer and drawing salary of ₹ 25,000 per month.
2. Mediclaim premium of ₹ 6,000 for himself & ₹ 5,000 for above son. The premiums were paid by cheque.

You are required to compute the total income for the assessment year 2011-12 and the tax payable. The various heads of income should be properly shown. Ignore the interest on bank loan for the period prior to 1.4.2010, as the bank had waived it.

Solution :

Computation of Total Income of Mr. Ashok for A.Y. 2011-12.

	Particulars		Amount	Amount
(1)	**Income from house property (Let out)**			
	Gross Annual Value (being Fair rent)		3,00,000	
	Less: Municipal tax		12,000	
	Net Annual Value		2,88,000	
	Less: Deduction:-			
	u/s 24(a) Standard Deduction (30% of NAV)	86,400		
	u/s 24(b) Interest on loan	42,000	1,28,400	1,59,600
(2)	**Profits and gains of business or profession**			

	Net profit before depreciation		2,20,000	
	Less: Expenditure allowed but not debited in P & L Account			
	Depreciation on equipment	30,000		
	Depreciation on building i.e. 10% of ₹ 5,00,000	50,000	80,000	
	Profits and gains of business or profession of current year		1,40,000	
	Less: Brought forward losses set off u/s 72		(90,000)	50,000
(3)	**Capital gains**			
	Consideration for Transfer		2,30,000	
	Less: Cost of acquisition		(1,80,000)	
	Short Term Capital Gains			50,000
	Gross Total Income			2,59,600
	Less: Deduction u/s			
	80C: LIC Premium paid	32,000		
	Repayment of bank loan	23,000	55,000	
	80D: Mmedical insurance premium		6,000	61,000
	Total income			**1,98,600**
	Tax payable			**Nil**

Notes :

1. Penal interest is not allowed u/s 24(b)
2. It has been assumed that interest, municipal tax on property used for business have already being charged while computing "business income before depreciation" i.e. ₹ 2,20,000.
3. STT is not allowed as expenditure on transfer.

Question No.15(d)

Thomas took voluntary retirement from State Bank of India on 1st May, 2010 under the Voluntary Retirement Scheme (VRS) and received a sum of ₹ 25 lakh on account of VRS benefits. At the time of his retirement, Thomas was having 47 months of service left and had served the organisation for 18 years 11 months. His last drawn Basic Pay ₹ 60,000, D.A. @ 60% of B/Pay (80% of which forming part of salary). Later, he started a business of plying, hiring and leasing of goods carriages from 1st June, 2010 by acquiring 3 heavy vehicles for ₹ 12 lakh, 2 medium goods vehicle for ₹ 5 lakh and 3 light commercial vehicles for ₹ 6 lakh. Although, he did not maintain regular books of account for his business, the diary maintained by him reveled gross receipts of ₹ 3,12,000 for the financial year ended 31st March, 2011 and he incurred an expenditure of ₹ 1,68,500 on the business towards salaries of drivers, repairs, fuel, etc. Depreciation on vehicle is not included in the said expenditure.

During the financial year 2010-11, he received a sum of ₹ 3,00,000 on account of pension from bank and he contributed a sum of ₹ 65,000 to his PPF account maintained with the said bank in the same year. His PPF account was credited with interest of ₹ 35,000 during the financial year 2010-11. He also purchased long-term infrastructure bonds for ₹ 20,000; Repayment of educational loan interest for the year ₹ 50,000. He also paid medical infrastructure premium of ₹ 14,000.

Further, he had two residential properties, one is self occupied and other is let out. During the financial year 2010-11, Thomas was able to let out his property only for 11 months on a monthly rent of ₹ 17,000. The total municipal taxes on the let out property was ₹ 8,000, 50% of which was paid by the tenant and 50% by him. The interest on loan taken for renovation of the self occupied property paid by him during the year was ₹ 34,000. The insurance premium on the house and actual repairs and collection charges paid are ₹ 1,600 and ₹ 18,000 respectively and the entire expenditure is borne by him. During the financial year 2010-11, he was able to recover the unrealized rent of ₹ 33,000 from old tenant who vacated the house during the August, 2009 after spending litigation expenses of ₹ 15,000. During the financial year 2010-11. Thomas suffered short term capital loss on account of sale of shares on various dates amounting to ₹ 8,50,500.

From the aforesaid information, you are required to compute the total income of Thomas for the AY. 2011-12 giving reasons in respect of each and every item and indicate the relief/rebate/deduction which he is entitled to claim.

Solution : **Computation of Total Income**

Assessee : Mr. Thomas **Previous Year : 2010-2011** **Assessment Year : 2011-2012**

₹			
(1) **Income from Salary**			
Pension Received			3,00,000
Voluntary Compensation			
Actual Amount Received		25,00,000	
Less : Exemption u/s 10(10c)			
Least of the following :			
(i) Actual Amount Received	25,00,000		
(ii) Maximum limit	5,00,000		
(iii) Higher of the following :			
(a) Last Drawn Salary × 3 × No. of Fully completed years of service = 88,800 × 3 × 18 = 47,95,200	47,.95,200	5,00,000	
(b) Last Drawn Salary × Balance of number of months of service left = 88,800 × 47 = 41,73,600			20,00,000
Last Drawn Salary = B/ Pay + D.A (forming part)			
= ₹ [60,000 + 60% of 80% of 60,000]			
= ₹ [60,000 + 28,800]			
= ₹ 88,800			
(2) **Income from House Property**			
(a) **Self occupied :**			
Annual Value	Nil		
(–) Interest on Loan u/s 24(b) ₹ 34,000			
– restricted upto ₹ 30,000	(30,000)	(30,000)	
(b) **Let-out House Property**			
Gross Annual Value			
(being the Rental Value) = 17,000 ×12	2,04,000		
Less : Municipal Tax Paid by the assessee during the year			
= 18,000 × 50%	9,000		
Net Annual Value (NAV)	**1,95,000**		
Less : Standard deduction @ 30% of NAV u/s 24(a)	58,500		
Less : Interest on loan u/s 24(b)	Nil	1,36,500	1,06,500
(3) **Income from Business or Profession**			
Presumptive Income u/s 44AE			
in the Business of plying, leasing or hiring trucks			
(i)Light goods vehicles = 3 × 4,500 × 10 =	1,35,000		
(ii)Medium goods vehicles = 2 × 4,500 × 10 =	90,000		
(iii)Heavy goods vehicles = 3 × 5,000 × 10 =	1,50,000		3,75,000
(5) **Income from Capital Gains**			
Short Term Capital Loss			(8,50,000)
Gross Total Income			**19,31,500**

Less : **Deductions under Chapter VIA**		
u/s 80 C – Deposits in PPF	65,000	
u/s 80D – Medical Insurance Premium	14,000	
u/s 80E – Interest paid on Education loan	50,000	
u/s 80CCF – Investments in Long-term Infrastructure Bonds	20,000	1,49,000
Total Income		**17,82,500**
Tax on Total Income of ₹ 17,82,500		3,88,750
(+) E/c @ 2%		7,775
(+) SHEC @ 1%		3,888
Tax Payable		**4,00,413**
Tax Payable (Rounded off u/s 288B)		4,00,410

Question No.15(f)

Mr. Anurag is a Cost Accountant in practice. The Income & Expenditure Account for the year ending March 31, 2011 read as follows :

	Expenses	₹		Income	₹
To	Employees cost	1,50,000	By	Professional earnings	16,00,000
To	Travelling & Conveyance	50,000	By	Dividend income	
To	Administration & Office exp.	4,00,000	–	from shares	2,00,000
To	Interest	1,50,000	–	from equity oriented mutual funds	1,00,000
To	Demat charges	10,000			
To	Net profit	11,40,000			
Total		**19,00,000**	**Total**		**19,00,000**

Other Information :

(a) Entire Dividend income is claimed as exempt from taxation by virtue of Section 10(34) and 10(35).

(b) Anurag claims that no expenditure has been incurred against the dividend income, which is claimed as exempt from tax.

(c) The value of investment in shares as on the first day and the last day of the previous year is ₹ 7,50,000 and ₹ 9,00,000 respectively.

(d) The value of investment in units of Mutual Funds as on the first day and the last day of the previous year is ₹ 5,00,000 and 2,00,000 respectively.

(e) All expenditure including interest expenditure of ₹ 1,50,000 incurred by Anurag are relating to taxable and non taxable Income. Demat charges are directly attributable to exempt income.

(f) The value of the total assets as appearing in the Balance sheet of the assessee as on the first day and last day of the previous year is ₹ 60,00,000 and ₹80,00,000 respectively.

You are required to compute the taxable income of Anurag for the assessment year 2011-12.

Solution :

Computation of Taxable Income A.Y. 2011-12

Particulars		**₹**
Income from Profits & Gains of Business or Profession – as per Working Note 1		8,40,000
Income from other sources – as per Working Note 2		Nil
	Total	**4,40,000**
Add : Disallowance u/s 14A – as per Working Note 3		31,804
	Taxable Income	**4,71,804**

Working Note 1 — Profits & Gains of Business or Profession

		₹	₹
Net profit as per Income & Expenditure Account			11,40,000
Less : Income considered under other heads			
– Dividend Income from shares		2,00,000	
– Income from UTI		1,00,000	3,00,000
	Taxable professional income		**8,40,000**

Working Note 2 — Income from other sources

		₹	₹
1.	Dividend Income from Shares	2,00,000	
	Less : Exempt under sec 10(34)	2,00,000	Nil
2.	Income from units in Mutual funds	1,00,000	
	Less : Exempt under sec 10(35)	1,00,000	Nil
	Taxable income from other sources		**Nil**

Working Note 3 — Disallowance u/s 14A

		₹
(a)	Amount of expenditure directly relating to exempt income (Other than interest) — Demat charges	10,000
(b)	Amount of interest incurred by way of expenditure other than those included above (1,50,000 × 8,25,000 / 70,00,000)	17,679
(c)	Amount equal to 0.5% of the average value of Investments (8,25,000 × 0.5%)	4,125
	Total amount disallowed u/s 14A (a) + (b) + (c)	**31,804**

Note :

1. Average value of Investment = (7,50,000 + 9,00,000) / 2 = ₹ 8,25,000.
2. Average value of Total Assets = (60,00,000 + 80,00,000) / 2 = ₹ 70,00,000.

Question No.15(g):

Mr. Samir submits the following information for the A.Y. 2011-12.

Particulars	₹
Taxable Income from Salary	1,64,000
Income from House property :	
House 1 Income	37,000
House 2 loss	(53,000)
Textile Business (discontinued on 10.10.2010)	(20,000)
Brought forward loss of textile business - A.Y. 2008-09	(80,000)
Chemical Business (discontinued on 15.3.2010)	
– b/f loss of previous year 2008-09	(25,000)
– unabsorbed depreciation of previous year 2008-09	(15,000)
– Bad debts earlier deducted recovered in July '2010	40,000

Leather Business	62,000
Interest on securities held as stock in trade	10,000

Determine the gross total income for the assessment year 2011-12 and also compute the amount of loss that can be carried forward to the subsequent years.

Solution :

Computation of Gross Total Income A.Y. 2011-12

	Particulars		₹	₹
I.	Income from Salary :			1,64,000
II.	Income from House property :			
	House 1 Income		37,000	
	House 2 loss		(53,000)	(26,000)
III.	Profits and Gains of Business or Profession :			
	(i) Textile business loss		(20,000)	
	(iii) Chemical business – Bad debts recovered taxable u/s 41(4)	40,000		
	Less : (i) Set off of brought forward loss of P.Y. 2008-09 u/s. 72	(25,000)	15,000	
			(5,000)	
	(iii) Leather Business Income	62,000		
	(iv) Interest on securities held as stock-in-trade	10,000	72,000	
			67,000	
	Less : B/f. business loss ₹ 80,000 restricted to balance of profits		67,000	Nil
	Gross Total Income			**1,38,000**

Note :

1.The unabsorbed loss of ₹ 13,000 (80,000-67,000) of Textile business can be carried forward to A.Y. 2011-12 for setoff u/s. 72, even though the business is discontinued.

2. The unabsorbed depreciation of ₹ 15,000 is eligible for set off against any income other than salary income. Since, Gross total income contains the balance of Income from Salary only, Unabsorbed depreciation cannot be adjusted. Hence, carried forward for adjustment in the subsequent years.

Question No. 16(a):

B Ltd. owns a new industrial undertaking, located in industrially backward State. It has been approved 100% EOU by the Board, constituted by the Central Government. It is engaged in the export of computer software and started functioning from the previous year 2006-2007.

During the first three years it earned a profits and claimed deduction under Sec. 10B. During the fourth year it suffered a loss of ₹ 10 lakh.

It furnishes the following particulars for the previous year 2010-2011.

	₹ (in lakh)
(i) Business profit	40
(ii) Export sales – FOB	100
(iii) Domestic sales	50
(iv) Receipt of convertible foreign exchange in India :	
(a) Receipt up to 30 September 2011	70

However, foreign exchange of ₹ 10 lakh is on account of sale to a foreign customer in India and ₹ 5 lakh is on account of reimbursement of freight, insurance, relating to export export and expenses incurred in Malaya in foreign exchange in providing technical services.

(b) Receipt in November 2011 but approved by the competent authority — 10

(c) Receipt in January 2012 but competent authority has not granted its approval — 10

(v) Converted foreign exchange kept in Malaya in State Bank of India in a separate account with the approval of RBI. — 10

Compute its total income in the following cases :

(a) it claims deduction under Sec. 10B;

(b) it revises its option under Sec. 10B(8) and wants not to claim deduction under Sec. 10B. it proposes to claim deduction under Sec. 80 IB.

Solution: (i) Claiming deduction under Sec. 10B

	₹ (in lakh)
Business profits	40
Less : Deduction for export profits :	20
	20
Less : Carried forward business loss [Sec. 72 (2)]	10
Total income	10

Working Note :

1. Export turnover :	
Convertible foreign exchange received up to 30 September 2011	
Less : (i) Convertible foreign exchange received from a foreign customer for sale in India	70
(ii) Reimbursement of foreign insurance relating to export and expenses incurred in	(–) 10
foreign exchange outside India in providing technical services.	(–) 5
Add: (i) Convertible foreign exchange received after prescribed time limit but approved by the competent authority	(+) 10
(ii) Convertible foreign exchange kept outside India with the permission of	(+) 10
Reserve Bank of India	75
2. Total turnover :	100
(i) Export sales	50
(ii) Domestic Sales	150
(ii) Claiming deduction under Sec. 80-IB	
Business profits	40
Less : Carried forward business loss	(–) 10
Gross total income	30
Less : Deduction under Sec. 80-IB 100% of profits derived from undertaking and included in GTI	30
Total Income	**Nil**

Question No.16 (b):

H Bros., an HUF, started an undertaking in "Special Economic Zone" during the previous year 2007-2008. From the following particulars relating to the previous year 2010-2011, compute the total income for the assessment year 2011-2012.

	₹ (in lakh)
(i) Total turnover	30

(ii)	Export sales	25
(iii)	Business profits	15
(iv)	Receipt of convertible foreign exchange in India up to 30 September 2011	
(v)	Convertible foreign exchange kept outside India with the permission of RBI for importing a new machinery	16
(vi)	Receipt of convertible foreign exchange in December 2011	4
(vii)	Convertible foreign exchange received for reimbursement for freight, insurance attributable to export	2

Solution : Computation of total income

	₹ (in lakh)
Business profits	15
Less : Deduction for export profits : [Sec. 10A]	10
Total income	5

Note :

1. Convertible foreign exchange received in December 2011 has not been included in Export turnover, because it is received after the prescribed time limit without approval of the competent authority.
2. Convertible foreign exchange kept outside India with the permission of RBI is included in Export turnover.
3. Reimbursement of freight and insurance in convertible foreign exchange is not included in Export turnover.

Question No.16 (c):

Z has set up a new undertaking at Durgapur during the year 2010-2011.

Compute taxable profits from the information given below:

	Particulars	**₹ (in lakh)**
(i)	Total turnover	50
(ii)	Export sales	48
(iii)	Export turnover	40
(iv)	Business profit	30
(v)	20 workers were employed during the year, and 18% plant and machinery are second-hand.	
(vi)	Imported raw material was not used.	

Will your answer be different in the following cases :

(i) Number of workers employed during the year is 19.

(ii) Number of permanent workers are 15 and number of temporary workers are 5.

(iii) Export sales are ₹ 44.99 lakh.

(iv) Percentage of old plant and machinery is 20.5%

(v) 5% raw material was imported from Japan due to domestic shortage.

(vi) ₹ 5 lakh convertible foreign exchange was received but kept outside India to import new machinery without the approval of RBI.

Solution:

Computation of Total Income

	₹ (in lakh)
Business profits	30
Less : Deduction for export profits [Sec. 10BA] :	24
Income	6

Comments :

(i) No deduction will be available as the number of workers is below 20

(ii) Deduction will be allowed. Number of workers should 20 whether permanent or temporary, regular or casuals.

(iii) No deduction will be allowed. Export sales are less than 90% of total turnover.

(iv) No deduction will be allowed. Percentage of old plant and machinery is more than 20% of the total investment in new plant and machinery.

(v) No deduction will be allowed as raw material has been imported.

Amount of deduction will be worked out as below:

	₹ (in lakh)
Business profits	30
Less : Deduction for export profits [Sec. 10BA] :	21
Total income	**9**

Question No.16(d): The books of account maintained by a National Political Party registered under the Representation of the People Act, 1951 for the year ended on 31-3-2011 disclose the following receipts :

(a) Rent of property let out to a departmental store at Chennai.	10,00,000
(b) Interest on deposits other than banks.	2,00,000
(c) Contribution from 100 persons (who have secreted their names) of ₹ 33,000 each	33,00,000
(d) Contribution @ ₹ 22 each from 1,00,000 members in cash	22,00,000
(e) Net profit of cafeteria run in the premises at Delhi	3,00,000

Compute the total income of the political party for the assessment year 2011-2012, with reason for inclusion or otherwise.

Solution :

Computation of Income of National Political Party: AY 2011-2012

Particulars	**₹**
(a) Rent from property: Exempt under Sec. 13A	—
(b) Income from business—Profits of cafeteria	3,00,000
(c) Income other sources:	—
(i) Interest on deposit other than banks: Exempt under Sec. ISA	—
(ii) Contributions from 100 persons exceeding ₹ 22,000 each—See Note below,	33,00,000
(iii) Contributions from 1,00,000 members: Exempt Sec. 13A.	—
Total income	**36,00,000**

Note : Any income of a political party received by way of voluntary contributions is exempt, provided:

(i) it keeps and maintains such books of account and other documents as would enable the Assessing Officer to properly deduce its income therefrom;

(ii) it keeps and maintains a record, name and address of the person who has contributed in excess of ₹ 20,000; and

(iii) its accounts are audited by an accountant defined in Explanation below Sec. 288(2).

Thus, in order to claim exemption in respect of voluntary contributions exceeding ₹ 20,000, a political party is required to keep and maintain a record, and names, address of persons who have made such contributions. The legislative intention is to ensure that there is transparency in the process of collection of funds [Common Cause *v.* Vol. 222 ITR 260 (SC)]. Hence, no exemption can be allowed in respect of contributions exceeding ₹ 20,000 from persons who have secreted their names.

Question No.16(e):

A company is engaged in the development and sale of computer software applications. It has started a new undertaking for which approval as a 100% export-oriented undertaking has been obtained from the CBDT. It furnishes the following data and requests you to compute the deduction allowable to it under Sec. 10B is respect of assessment year 2011-2012.

Particulars	**₹ (in lakh)**
Total profit of the company for the previous year	50
Total turnover, i.e. Export sales and Domestic sales for the previous year	500
Consideration received in respect of export of software received in convertible foreign exchange within 6 months of the end of the previous year	250
Sale proceeds credited to a separate account in a bank outside India with the approval of RBI	50
Telecom and insurance charges attributable to export of software	10
Staff costs and travel expenses incurred in foreign exchange to provide technical assistance outside India to a client	40

Solution :

Computation of Income of a 100% export-oriented undertaking: AY 2011-2012

Particulars	**₹ (in lakh)**
Total profit	50
Less: Deduction under Sec. 10B:	25
Taxable profits	25

Note :

Export turnover	(₹ in lakh)
(i) Sale proceeds of software received in convertible foreign exchange within the prescribed perio	250
(ii) Sale proceed in convertible foreign exchange kept outside India with the approval of RBI	50
	300
Less : (i) Telecom and insurance attributable to export turnover	(-) 10
(ii) Expenses incurred in foreign exchange outside India to provide technical assistance to a client there	(-) 40
Export turnover	**250**

Question No.16 (f):

XY & Co., a partnership concern had established an undertaking for manufacturing computer software in Free Trade Zone. It furnishes the following particulars of its second year operations, ending on 31-03-2011:

Particulars	₹ (in lakh)
Total sales of business	100.00
Export sales	80.00
Profit of the business	10.00

Out of the total sales, realisation of sale of ₹ 5 lakh is difficult because of the deficiency of the buyer. Realisation of rest of the sales is received in time.

The plant and machinery used in the business had been depreciated @ 15% on SLM basis of depreciation and depreciation of ₹ 3 lakh was charged to the Profit and Loss Account.

Compute the taxable income of XY & Co for the assessment year 2011-2012.

Solution:

Computation of Taxable Income for the A.Y. 2011-12

Particulars	₹ (in lakh)
Profit of business	10,00,000
Add : Depreciation charged on SLM basis	30,000
	1,30,000
Less : Depreciation on WDV basis @ 15% of 17,00,000 – [See Note below]	2,55,000
	10,45,000
Less : Deduction under Sec. 10A : 10,45,000 × 75 ÷ 100	7,83,750
Taxable income	**2,61,250**

Note :

		₹
1.	Computation of Depreciation :	
	Total purchase price of machine : 3,00,000 15 × 100	20,00,000
	Less : Depreciation in the first year @ 15%	3,00,000
	WDV at the end of first year	17,00,000
	Less: Depreciation for second year @ 15%	2,55,000
	WDV at the end of second year	**14,45,000**
2.	Export Turnover:	
	Export Sales	80,00,000
	Less: Remittance not received due to insolvency of buyer	5,00,000
		75,00,000

Question No.16 (g) :

Mr. Gangaprasad, resident in India, turns out 65 years of age on 31st December 2010. He furnishes the following particulars of his income for the previous year 2010-2011:

Particulars		₹
(i)	Rent from agriculture land, located in a village of Jharkhand district	2,50,000
(ii)	Rent from building, located in the vicinity of agriculture land, which is assessed to land to revenue and the tenant, cultivating the agricultural land, occupies it for his dwelling and storing purposes	60,000
(iii)	Income from business	3,00,000
(iv)	Long-term capital gain	1,00,000

He maintains a motor car which is used 70% for business purpose, 10% for collecting rent from building and 20% for collecting rent from agriculture land. He has incurred and expenditure of ₹1,00,000 by way of petrol, repair and salary of the driver. He also claims depreciation on the written down value of the motor car on 1.4.2010. ₹ 2,00,000 @ 15%. He has paid ₹ 2000 as local tax to the village panchayat in respect of the building. He also paid ₹ 30,000 land revenue to the Government on account of agriculture land.
Determine his total income and tax liability in the following cases:

(i) Agriculture produce goes under marketing process to fetch better rates in the market,

(ii) Agriculture produce goes under marketing process to make it saleable in the local market.

Solution :

Computation of Total Income for the Assessment Year 2011-2012

(i) Income from house property:		
Gross annual value based on rent	60,000	
Less : Local tax to village panchayat: No deduction is allowed as— it is not a municipal tax	*Nil*	
Net annual value	**60,000**	
Less: (i) Statutory deduction @ 30% of NAV	18,000	
Income from House Property		42,000
Income from house property to be treated as agriculture income provided the agriculture produce is not subjected to marketing produce to fetch better rates [Sec. 2(1A)(c)]		
(ii) Income from business		3,00,000
(iii) Long-term capital gain		1,00,000
(iv) Income from other sources :		
Rent from agriculture land	2,50,000	
Less: Permissible deduction (Sec. 57) :		
(a) Land revenue	(-) 30,000	
(b) Realisation expenses	(-) 20,000	
(c) Depreciation: Not admissible Sec. 57(ii) see Note below		
Income from agriculture [Sec. 2(1A)(a)]	**2,00,000**	
Total income, subject to increase by ₹ 42,000 when produce is subjected to marketing process to fetch better rates.		**4,42,000**

Solution:

Computation of Tax Liability: AY. 2011-2012

Particulars	Senior citizen	
	Case I Produce subjected to marketing process for better rates ₹	**Case II** Produce subjected to marketing process to make it saleable ₹
Non-agriculture income	4,42,000	4,00,000
Agriculture income	2,00,000	2,42,000
Total Income	**6,42,000**	**6,42,000**
(a) Tax on non-agriculture income + agriculture income as if it is the total income:		
(i) Tax on long-term capital gain	20,000	20,000

(ii) Tax on balance of total income at slab rates	34,400	34,400
Gross Tax Liability (i) + (ii)	54,400	54,400
(b) Tax on agriculture income + basic exemption limit	20,000	24,200
(c) Tax payable: (a) – (b)	34,400	30,200
Add: Education cess @ 2%	688	604
SHEC @ 1%	344	302
Tax payable	**35,432**	**31,106**
Tax payable to be rounded off to the nearest multiple of ₹ 10 (Sec. 288B)	35,430	31,110

Note :

While computing income under "other sources" depreciation is allowed only in case where plant, machinery or furniture is let out on hire or building along with plant, machinery or furniture is let out on hire [Sec. 57(ii)]

Hence no depreciation is allowed in respect of motor car.

Proportionate depreciation on motor car is permissible under the head "business or profession":

It is assumed it has been allowed as the expression "income from business" refers to taxable income after permissible deductions.

Question No.16 (h) :

RP (HUF), furnishes the following particulars of its income and outgoing for the previous year 2010-2011.

Receipts :	4,00,000
(i) Short-term capital gain	1,00,000
(ii) Gross winning from lottery	12,00,000
(iii) Sale consideration of 3/4th of agriculture produce, derived from land located in India, the balance produce has been kept for family use.	50,000
(iv) Net sale proceeds of wild grass and fruits from trees of spontaneous growth	
Payments:	
(i) Repair of tube-well	60,000
WDV of tuble-well on 1-4-2010	10,00,000
(ii) Wages paid to agriculture labour	6,00,000
(iii) Manuring and spraying charges	50,000
(iv) Rent of the building, used for storing agriculture produce on site	50,000
(v) Petrol, repair, salary of driver and insurance of motor car.	1,50,000
WDV of motor car on 1-4-2010	2,00,000
50% use of the motor car is for personal purpose of the family	
(vi) LIP paid to insure members of the family	20,000
(vii) School fees paid for 3 children of the family @ ₹ 15,000 per child	45,000
(viii) Purchase of infrastructure bonds, covered under Sec. 80C(2)(xix)	90,000
(ix) Deposit with LIC for maintenance of a dependant member with disability:	
Unabsorbed losses brought forward:	
AY: 2001-2002	40,000

AY: 2003-2004	5,00,000
AY: 2006-2007	1,00,000

Determine the total income of the HUF and its tax liability for the assessment year 2011-2012.

Solution :

Assessee : R P (HUF)

Computation of Total Income: AY 2010-2011

Particulars	₹	₹
Computation of net agriculture income for the purpose of aggregation to determine the rate of tax applicable to non-agriculture income of the HUF. Such computation is done under the head business profession:		
(1) Sale proceeds of agriculture produce		12,00,000
Add: Market value of produce kept for family use:		4,00,000
12,00,000 × (4/3) × (1/4)		16,00,000
Less: Permissible deductions:		
(i) Repair of tube-well	60,000	
(ii) Wages	6,00,000	
(iii) Rent	50,000	
(iv) Petrol, repair, salary of driver— 50%	75,000	
(v) Manuring and spraying	50,000	
(vi) Depreciation on tube-well @ 10% on WDV	1,00,000	
(vii) 50% depreciation on motor car: (15% of 2,00,000) x 50%	15,000	9,50,000
Less: Adjustment for Carry Forward Losses :		
(i) Loss 2001-2002-not allowed	Nil	
(ii) Loss from AY 2003-2004	1,00,000	
(iii) Loss from AY 2006-2007	45,000	1,45,000
Net Agriculture Income		**5,05,000**
(2) Computation of Total Income		
(a) Short-term capital gain		4,00,000
(b) Income from other sources:		
(i) Winnings from lottery	1,00,000	
(ii) Net sale proceeds of non-agriculture produce	50,000	1,50,000
Gross Total Income (excluding Agricultural Income)		**5,50,000**
Less: Contributions paid for approved savings [Sec. 80C(2)]:		
(i) LIP on the life of members	20,000	
(ii) School fees for 3 children of the HUF [Sec. 80(4)(c)]	Nil	
(iv) Purchase of NSC	90,000	
	1,10,000	
But deduction restricted upto a maximum of ₹1,00,000		1,00,000
2. Deposit for maintenance (including medical treatment) of a dependant with disability (Sec. 80DD)		50,000
Total Non-Agricultural Income		**4,00,000**

Computation of Tax Liability

(i) Income tax on winnings 30% on ₹ 1,00,000		30,000
(ii) Income tax on non-agriculture + agriculture income:		
3,00,000 + 5,05,000 at slab rates		
(Non-agricultural income = 3,00,000 = 5,50,000 – 1,00,000		
– 1,00,000 – 50,000)		
(a) Income tax on 8,05,000 as if it is the total income	95,500	
(b) Income tax on agriculture income + exemption limit as if		
it is the total income: 5,05,000 + 1,60,000 = 6,65,000	67,000	
Income tax on non-agriculture income: (a) – (b)	28,500	28,500
Tax on total income		58,500
Add:		
(i) Education cess @ 2%		1,170
(ii) SHEC @ 1%		585
Tax payable		**60,255**

Question No.16(i) :

B Ltd. grows sugarcane to manufacture sugar. The data for the financial year 2010-11 is as follows :

Cost of cultivation of sugarcane	₹ 6,00,000
Market value of sugarcane when transferred to factory	₹ 10,00,000
Other manufacturing cost	₹ 6,00,000
Sales of sugar	₹ 25,00,000
Salary of Managing Director who looks after all operations of the Company	₹ 3,00,000

Solution :

(1)	**Business Income :**	
	Sales of Sugar	₹ 25,00,000
	Less: Market value of sugarcane when transferred to factory	₹ 10,00,000
	Other manufacturing cost	₹ 6,00,000
	Salary of Managing Director	₹ 3,00,000
		₹ 6,00,000
(2)	**Agricultural Income :**	
	Market value of sugarcane when transferred to factory	₹ 10,00,000
	Less: Cost of cultivation	₹ 6,00,000
		₹ 4,00,000

Question No.17(a)

D Ltd., a closely-held Indian company, is engaged in the business of manufacture of chemical goods (value of plant and machinery owned by the company is ₹ 55 lakh). The following information for the financial year 2010-11 are given :

D Ltd. is engaged in the business of manufacture of garments.

	₹
Sale proceeds of goods (domestic sale)	25,00,000
Sale proceeds of goods (export sale)	7,00,000
Amount withdrawn from general reserve (reserve was created in 1996-97 by debiting P&L A/c)	2,00,000

Amount withdrawn from revaluation reserve	1,50,000
Total	**35,50,000**
Less : Expenses	
Depreciation (normal)	6,16,000
Depreciation (extra depreciation because of revaluation)	2,70,000
Salary and wages	2,10,000
Wealth tax	10,000
Income-tax	3,50,000
Outstanding customs duty (not paid as yet)	17,500
Proposed dividend	60,000
Consultation fees paid to tax expert	21,000
Other expenses	1,39,000
Net Profit	**18,56,500**

For tax purposes the company wants to claim the following :

—Deduction under section 80-1B (30 per cent of ₹ 14,56,500).

—Depreciation under section 32 (₹ 5,36,000)

The company wants to set off the following losses/allowances :

	For tax purposes ₹	For accounting purposes ₹
Brought forward loss of 2003-04	14,80,000	4,00,000
Unabsorbed depreciation	—	70,000

Compute the net income and tax liability of D Ltd. for the assessment year 2011-12 assuming that D Ltd. has a (deemed) long-term capital gain of ₹ 60,000 under proviso (i) to section 54D(2) which is not credited in profit and loss account.

Solution :

Computation of Tax Liability u/s 115 JB

	₹
Net profit as per P&L A/c	18,56,500
Add :	
Excess depreciation [i.e., ₹ 6,16,000 + ₹ 2,70,000 — ₹ 5,36,000]	3,50,000
Wealth tax	10,000
Income tax	3,50,000
Customs duty which is not paid	17,500
Proposed dividend	60,000
Total	**26,44,000**
Less : Amount withdrawn from reserve (i.e., ₹ 2,00,000+₹ 1,50,000)	3,50,000
Business income	**22,94,000**
Less : Unabsorbed loss	14,80,000
Business Income	8,14,000
Long-term capital gain	60,000
Gross Total Income	**8,74,000**

Less : Deductions under section 80-IB [30% of ₹ 4,14,000]	1,24,200
Net Income (rounded off)	7,49,800
Tax liability (under normal provisions) [20% of ₹ 60,000 + 30% of ₹ 6,89,800, plus 3% of tax as cess]	2,25,508

Computation of Book profits

Net Profit	18,56,500
Add :	
Depreciation (i.e. ₹ 6,16,000 + ₹ 2,70,000)	8,86,000
Wealth tax	Nil
Income-tax	3,50,000
Proposed dividend	60,000
Less : Amount withdrawn from general reserve	(–) 2,00,000
Unabsorbed depreciation	(–) 70,000
Depreciation (normal)	(–) 6,16,000
Amount withdrawn from revaluation reserve to the extent it does not exceed extra depreciation because of revaluation	(–) 1,50,000
Book profit	**21,16,500**
Tax liability (18.54% of book profit)	3,92,399

D Ltd. will pay ₹ 3,92,399 as tax for the assessment year 2011-12 as per section 115JB. Tax credit is however, available in respect excess tax (i.e., ₹ 1,66,891) under section 115JB.

Question No.17 (b):

What is the due date of filling of return of income in case of a non-working partner of a firm whose accounts are not liable to be audited?

Answer : Due date of furnishing return of income in case of non-working partner shall be 31st July of the assessment year whether the accounts of the firm are required to be audited or not.

A working partner for the above purpose shall mean an individual who is actively engaged in conducting the affairs of the business or profession of the firm of which he is a partner and is drawing remuneration from the firm.

Question No.17(c):

What do you mean by annexure less return? What is the manner of filling the return of income?

Answer : The return of income and return of fringe benefits required to be furnished in Form No.ITR-1,ITR-2,ITR-3,ITR-4,ITR-5, ITR-6 or ITR-8 shall not be accompanied by a statement showing the computation of the tax payable on the basis of the return, or proof of the tax, if any, claimed to have been deducted or collected at source or the advance tax or tax on self-assessment, if any, claimed to have been paid or any document or copy of any account or Form or report of audit required to be attached with the return of income or the return of fringe benefits under any of the provisions of the Act.

Manner of filling the return: The return of income or return of fringe benefits referred to in sub-rule (1) may be furnished in any of the following manners, namely:-

(i) Furnishing the return in a paper form;
(ii) Furnishing the return electronically under digital signature;

(iii) Transmitting the data in the return electronically and thereafter submitting the verification of the return in Form ITR-V;

(iv) Furnishing a bar-coded return in paper form.

Question No.17(d):

Is e-filling of return mandatory? State the assessee's for whom e-filling of returns is mandatory?

Answer : It shall be mandatory for the following assessee's to file the return electronically:

(a) A firm required to furnish the return in Form ITR-5 and to whom provisions of Section.44AB are applicable, or

(b) A company required to furnish the return in Form ITR-6

Question No.17(e):

Can unabsorbed depreciation be carried forward even if the return is filed after due date?

Answer : Unabsorbed depreciation can be carried forward even if the return of loss is submitted after the due date, as it is not covered under Chapter VI of set off or carry forward of losses but covered u/s 32(2).[East Asiatic Co.(India) Pvt. Ltd. vs.CIT (1986) 161 ITR 135(Mad.)]

Question No.17 (f):

Can a belated return of income filed u/s 139(4) be revised?

Answer : There was a difference of opinion among various courts regarding filling of revised return in respect of belated returns. However, it has been held that a belated return filed u/s 139(4) cannot be revised as section 139(5) provides that only return filed u/s 139(1) or in pursuance to a notice u/s 142(1) can be revised [Kumar Jagdish Chandra Sinha vs.CIT(1996) 220 ITR 67(SC)].

Question No.17 (g):

Can a revised return be further revised?

Answer : If the assessee discovers any omission or any wrong statement in a revised return, it is possible to revise.

Question No.17 (h):

What are the different forms used for furnishing return under Income Tax Act, 1961?

Answer: The different forms used for furnishing return of Income are as follows:

ITR - 1	Return of Income for Individuals having salary and interest income and no other Income
ITR-2	Return of income for Individuals and HUFs having income from any source except from business or profession
ITR-3	Return of income for Individuals and HUFs being partners in Firms and not having Proprietary business or profession
ITR -4	Return of Income for Individuals and HUFs having Proprietary business or profession
ITR-5	Combined form of Return of Income and Fringe Benefits for Firms/AOP/BOI.
ITR-6	Combined Form for Return of Income and Frlnge Benefits for Companies

ITR-7	Combined Form For Return of Income and Fringe Benefits For Charitable/Religious Trusts, Political parties and other Non-Profit Organisations
ITR-8	Stand alone form for Return of Fringe Benefits for persons who are not liable to file Return of income but are liable to file Return of Fringe-Benefits
ITR-V	Return of Income/Fringe Benefits transmitted electronically without digital signatures

Question No.17 (i):

Define belated return.

Answer: BELATED RETURN [SECTION 139(4)]

(1) Any person who has not furnished a return within the time allowed to him under section 139(1) or within the time allowed under a notice issued under section 142(1) may furnish the return for any previous year at any time -

(i) before the expiry of one year from the end of the relevant assessment year; or

(ii) before the completion of the assessment, whichever is earlier.

(2) Interest is required to be paid under section 234A, as stated above.

Question No.17 (j):

What is a protective assessment under Income-tax law? What is the procedure followed for the recovery of tax in such cases?

Answer: A protective assessment is made in a case where there are doubts relating to the true ownership of the income. If there is an uncertainty about the taxing of an income in the hands of Mr. A or Mr. B, then at the discretion of the Assessing Officer, the same may be added in the hands of one of them on protective basis. This is to ensure that on finality, the addition may not be denied on the ground of limitation of time. Once finality regarding the identity of the tax payer to be taxed is established, the extra assessment is cancelled. But the Department cannot recover the tax from both the assessees in respect of the same income. Penalty cannot be imposed on the strength of a protective assessment.

Question No.17 (k):

Joseph engaged in profession filed his return of income for assessment year 2011-12 on 15th November, 2011. He disclosed an income of ₹4,00,000 in the return. In February, 2012 he discovered that he did not claim certain expenses and filed a revised return on 3rd February, 2012 showing an income of ₹1,80,000 and claiming those expenses. Is the revised return filed by Joseph acceptable?

Answer: Joseph is engaged in profession. The due date for filing income tax return for assessment year 2011-12 as per section 139(1) of the Income-tax Act is 30th September, 2011 if his accounts are required to be audited under any law. The due date is 31st July, 2011 if the accounts are not required to be audited under any law.

The return was filed beyond the due date prescribed in section 139(1). The return so filed is covered by section 139(4) and the time limit is one year from the end of the relevant assessment year. The Apex court in *Kumar Jagadish Chandra Sinha v. CIT 220 ITR 67 (SC)* has held that a return filed under section 139(4) is not eligible for revision and hence a revised return cannot be filed.

Hence, the return filed by Joseph is not valid as the original return was not filed before the due date mentioned in section 139(1).

Question No.17 (l):

An assessee filed a return of income on 31.8.2011 in respect of Assessment year 2011-12 disclosing an income of ₹ 5 lakhs from business. It was not accompanied by proof of payment of tax due on self-assessment. Discuss the validity of such a return.

Answer : As per Explanation to sub-section (9) of section 139 a return is regarded as defective unless it is accompanied by proof of tax deducted at source, advance tax and tax on self-assessment, if any, claimed to have been paid. Therefore, the return is prima facie defective. It is not invalid at that stage. On receipt of the return, the Assessing Officer has to intimate the defect to the assessee and give him an opportunity to rectify the defect within a period of 15 days from the date of such intimation or within such further period which, on application by the assessee, he may, in his discretion allow. If the defect is not rectified within the said period, the return will be treated as an invalid return and the provisions of the Income-tax Act shall apply, as if the assessee has failed to furnish the return.

Also, it may noted that section 140A(3) says that if an assessee fails to pay tax or interest on self assessment he shall be deemed to be an assessee in default in respect of the tax or interest or both remaining un paid and all the provisions of the Act shall apply accordingly.

Question No.17 (m):

If an assessment is remanded back to Assessing Officer, can he introduce new sources of income for assessment?

Answer: Where the assessment is set aside by the Tribunal and the matter remanded to the Assessing Officer, it is not open to him to introduce into the assessment new sources of income so as to enhance the assessment. Any power to enhance is confined to the old sources of income which were the subject matter of appeal [Kartar Singh vs.CIT (1978) 111 ITR 184 (P &H)].

Question No.17 (n):

Can Department make fresh computation, once the assessment is made final?

Answer: It is now a well settled principle that an assessment once made is final and that it is not open to the department to go on making fresh computation and issuing fresh notices of demand to the end of all time. [ITO vs. Habibullah (S.K.) (1962) 44 ITR 809 (SC)]

Question No.17 (o):

Can an Assessing Officer make an assessment for a year other than the assessment year for which the return is filed?

Answer: It is not open to the Assessing Officer to make assessment in respect of a year other than the Assessment Year for which the return is filed. Thus, in respect of a return filed for assessment year 2010-11, assessment cannot be made for the assessment year 2011-12. [CIT vs. Amaimugan Transports Pvt. Ltd.(1995) 215 ITR 553 (Mad.)]

Question No.17 (p):

Can an Assessing Officer assess the income below the returned income or assess the loss higher than the returned loss?

Answer: The Assessing Officer cannot assess income under section 144 for an assessment below the returned income or cannot assess the loss higher than the returned loss.

Question No.18 (a)

A & B are members of AOP, sharing profit and losses in the ratio of 5 : 3 and they are allowed the following payments:

	A ₹	B ₹
(i)Salary	40,000	60,000
(ii)Interest on capital or loan	20,000	10,000

You are required to compute taxable business profits of AOP and share of each member for the previous year 2010-2011 in the following cases:

(a)AOP has earned profit of ₹ 3,00,000 after making the above payments;
(b)AOP has earned profit of ₹ 3,00,000 before making the above payments;
(c)AOP has suffered loss of ₹ 3,00,000 after making the above payments; and
(d)AOP has suffered loss of ₹ 3,00,000 before making the above payments.

Solution: **Computation of Income of AOP for the PY 2010-2011**

Particulars ₹	Case (a) ₹	Case(b) ₹	Case (c) ₹	Case (d) ₹
Profit/ loss	(+) 3,00,000	(+) 3,00,000	(-) 3,00,000	(-) 3,00,000
Add: Inadmissible payments				
[Sec. 40 (ba)]:				
(i) Salary to members (40,000+60,000)	(+) 1,00,000	—	(+) 1,00,000	—
(ii) Interest on capital/loan	(+) 30,000	—	(+) 30,000	—
to members: (20,000 + 10,000)				
Profit/loss as per income-tax law	(+) 4,30,000	(+) 3,00,000	(-) 1,70,000	(-) 3,00,000

Solution:

Computation of Member's share in the Income/Loss of the AOP

Particulars	Case (a)		Case (b)		Case (c)		Case (d)	
	A ₹	B ₹	A ₹	B ₹	A ₹	B ₹	A ₹	B ₹
Salary	40,000	60,000	40,000	60,000	40,000	60,000	40,000	60,000
Interest	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000
Divisible profit:								
(a) 4,30,000–1,30,000	1,87,500	1,12,500	X	X	X	X	X	X
(b) 3,00,000–1,30,000	X	X	10,6250	63750	X	X	X	X
(c) (–) 1,40,000 +	X	X	X	X	(1,68,750)	(101250)	X	X
(–)1,30,000= (-)2,70,000								
(d) (-) 3,00,000 +								
(-) 1,30,000= (-) 4,30,000	X	X	X	X	X	X	(2,68,750)	(161250)
Share of profit/loss	2,47,500	1,82,500	1,66,250	1,33,750	(108750)	(31250)	(208750)	(91250)

(i) *Where assessed business income is a profit:* Beneficial payments (i.e. salary, bonus, commission and interest) made to partners should be deducted from assessed profit to arrive at divisible profit, which is to be apportioned among members.

(ii) *Where assessed business income is a loss:* Beneficial payments made to partners should be added to assessed loss to arrive at the divisible loss which is to be apportioned among members.

Question No.18 (b)

Anand and Aniket are equal members in AA & Associates. The profit and loss account of the AOP for the year ending 31st March 2011 is as follows:

Particulars	₹	Particulars	₹
Selling and administrative		Gross Profit	20,00,000
Expenses	8,00,000	Income from house property	3,60,000
Interest to Anand @ 15%	60,000		
Remuneration:			
Anand	1,50,000		
Aniket	1,50,000		
Net profit:			
Anand	6,00,000		
Aniket	6,00,000		
	23,60,000		**23,60,000**

Other information :

1. Selling and administrative expenses include ₹ 60,000 paid to a consultant in cash.
2. The other income/investment details of the members are given as below:

Members	Income	Source of income	Investments
Anand	90,000	Interest on fixed deposit from bank	Purchase of NSC VIII ₹ 30,000
Aniket	1,00,000	Interest on govt. securities	Contribution to PPF ₹ 50,000

Compute the tax liability of the AOP and it members.

Solution:

Computation of Total Income of AOP: PY 2010-2011

Particulars	₹
Net profit	12,00,000
Add: Inadmissible payments.	
1. Fees paid to consultants in cash Sec. 40A (3)	60,000
2. Interest paid to members [Sec. 40(ba)]:	60,000
3. Remuneration paid to members Sec. 40(ba)	3,00,000
	16,20,000
Less: Income from house property	3,60,000
Business profits	**12,60,000**
Add: Income from house property	3,60,000
Total income	**16,20,000**
Tax liability of AOP on total income	
Tax on slabs rates	3,90,000
Add:	
Education cess 2%	7,800
SHEC @ 1%	3,900
Tax payable	**4,01,700**

Allocation of Income amongst the Members:

Particulars	Anand ₹	Aniket ₹	Total ₹
Interest	60,000	—	60,000
Remuneration	1,50,000	1,50,000	3,00,000
Share of divisible profit (12,60,000-60,000-3,00,000)	4,50,000	4,50,000	9,00,000
Share of profit	6,60,000	6,00,000	12,60,000
Share of income from house property	1,80,000	1,80,000	3,60,000
	8,40,000	**7,80,000**	**16,20,000**

Computation of Total Income of Members:

Particulars	Anand ₹	Aniket ₹
Share income from AOP	8,40,000	7,80,000
Income from other sources:		
Interest on bank deposits	90,000	—
Interest on government securities	—	1,00,000
Gross Total Income	**9,30,000**	**8,80,000**
Less: Deduction under Sec. 80C	30,000	50,000
Total income	**9,00,000**	**8,30,000**
Tax liability of members : Tax on slab rates	1,74,000	1,53,000
Add: Education Cess @ 2% on income tax	3,480	3,060
Add : SHEC @ 1%	1,740	1,530
	1,79,220	**1,57,590**
Less: Rebate on share of profit at the average: (See Note below)	1,67,272	1,48,097
Tax payable	11,948	9,493
Tax payable rounded off to the nearest multiple of ₹ 10 (See. 288B)	11,950	9,490
	15,050	12,290

Question No.18 (c)

A, B and C Ltd. are three members of an AOP, sharing profit and losses in the ratio 2:2:1. The AOP discloses its income for the PY 2010-2011 as below:

Particulars	₹
(i) Long-term capital gains	4,00,000
(ii) Business profits	6,00,000

Determine tax liability of AOP in the following cases:

(i) C Ltd. is an Indian company

(ii) C Ltd. is a foreign company

Solution: Allocation of income of AOP among partners

Particulars of income	A ₹	B ₹	C Ltd ₹
Long-term capital gains	1,60,000	1,60,000	80,000
Business profits	2,40,000	2,40,000	1,20,000
Share income of the members	4,00,000	4,00,000	2,00,000

Tax liability of AOP

Particulars	Case – I C Ltd. an Indian company ₹	Case – II C. Ltd. as foreign company ₹
Tax on the share of C Ltd.		
Case I : 1,20,000 x 33.99%	40,788	—
Case II: 1,20,000 x 42.23%	—	50,676
Tax on balance income at AOP:		
(i) Long-term capital gain 4,00,000 x 22.66%	90,640	90,640
(ii) Business profits 6,00,000 x 33.99%	2,03,940	2,03,940
Total tax payable	3,35,368	3,45,256
Total Tax (Rounded off a/c 288B)	3,35,370	3,45,260

Question No.18 (d)

R, S and T Ltd. (a widely held domestic company) are members in an AOP for the previous year 2010-2011. They share profit and losses in the ratio 30%, 40% and 30%. Taxable business income of AOP is determined at ₹ 8,00,000. Personal income of the partners are given below:

	₹
R - House property	90,000
S – Short-term capital gain	1,00,000

R deposits ₹ 20,000 in CTDS-15-year account in Post Office in February 2010. S purchases NSC VIH-Issue for ₹ 25,000 in December 2010.

Determine the tax liability of the AOP and its partners

Solution:

Computation of Tax Liability of AOP for the Previous Year 2010-2011.

Allocation of AOP income among members:

Particulars	R ₹	Y ₹	T Ltd. ₹
Business profit	2,40,000	320000	240000
Tax liability of AOP: 8,00,000 × 33.99%		2,71,920	

Tax liability of members:

Particulars	R ₹	Y ₹	T Ltd. ₹
Share income from AOP	2,40,000	320000	240000
AOP charged at maximum marginal rate	Exempt	Exempt	Exempt
Personal income of members	90,000	75,000	Nil
Personal income below taxable limit	Exempt	Exempt	X

Question No.19 (a)

GMK are partners in a firm assessed as an association of persons. They share profit and losses in the ratio of 4:3:3. The abridged profit and loss for the previous year 2010-2011 is as follows:

Particulars	₹	Particulars	₹
Business expenses	5,00,000	Gross profits	6,85,000
Salaries to partners		Short-term capital gain	2,80,000
G	60,000	Interest on drawings	
M	40,000	G	5,000
K	50,000	M	20,000
Bonus to partners:		K	10,000
G	30,000		
M	20,000		
Commission to K	40,000		
Interest to partners:			
G	20,000		
M	15,000		
K	25,000		
Net profit			
G	80,000		
M	60,000		
K	60,000		
	10,00,000		**10,00,000**

Business expenses include donation to Nalanda University ₹ 50,000. Compute the taxable income of AOP, its tax liability and tax liability of its members in the following

Personal Income of Members	Case-I ₹	Case-II ₹
G: Interest on bank deposits	40,000	1,00,000
M: Interest on government securities	65,000	1,20,100
K: Income from house property	50,000	1,10,000
LIP paid by every member on a policy of ₹ 1,00,000.	20,000	20,000

Solution :

Computation of Taxable Business Profits

Particulars	₹
Net profit as per Profit & Loss A/c	2,00,000
Add: (i) Donation to Nalanda University	50,000
(ii) Salaries to partners [Sec. 40(ba)] (60,000 + 40,000 + 50,000)	1,50,000
(iii) Bonus to partners 30,000 + 20,000	50,000
(iv) Interest on capital (Net of Interest on Drawings)	15,000
G 20,000 – 5,000 =	15,000
K 25,000 – 10,000 =	15,000
(v) Commission to K	40,000
	5,20,000
Less: Short-term capital gain	2,80,000
Taxable profits	**2,40,000**
(a) Computation of total income	
Add: (i) Business profits	2,40,000

(ii) Short-term capital gain	2,80,000
Gross Total Income	**5,20,000**
Less: Deduction for charitable donation (Sec. 80G)	
(a) Actual donation ₹ 50,000 or,	
(b) 10% of gross total income:	
whichever is less, is qualifying amount. It is ₹ 50,000.	25,000
Amount of deduction 50% of qualifying amount	
Total income	4,95,000

Tax liability of AOP :

Particulars	**Case I**	**Case II**
(a) Tax on total income at slab rates including Education Cess and SHEC	1,00,425	—
(b) Tax on total income at maximum marginal rates including surcharge plus education cess plus SHEC	—	1,68,251
Tax payable	1,00,425	1,68,251
Tax payable rounded off (u/s 288 B)	1,00,420	1,68,250

Tax liability of members:

Case:(a) where AOP is taxed at slab rates:

Share of income from AOP: (₹)	**G** (₹)	**M** (₹)	**K** (₹)	**Total**
(i) Salary	60,000	40,000	50,000	1,50,000
(ii) Bonus	30,000	20,000	—	50,000
(iii) Commission	—	—	40,000	40,000
(iv) Interest	15,000	—	15,000	30,000
1,05,000	60,000	1,05,000	2,70,000	
(v) Divisible loss : (2,40,000-25,000)-270,000 = (-) 55,000	(-) 22,400	(-) 16,500	(-) 16,500	(-) 55,000
Share of business profit	83,000	43,500	88,500	2,15,000
Share of short-term capital gain	112,000	84,000	84,000	2,80,000
Share of income from AOP	**1,95,000**	**1,27,500**	**1,72,500**	**4,95,000**

Total income and tax liability of members :

Particulars	**G**	**M**	**K**
Income from house property	—	—	50,000
Income from other sources	40,000	65,000	—
Share income from AOP:	1,95,000	1,27,500	1,72,500
Gross total income	**2,35,000**	**1,92,500**	**2,22,500**
Less: Deduction under Sec. 80C: LIP restricted to 20% of policy	20,000	20,000	20,000
Total income	**2,15,000**	**1,72,500**	**2,02,500**

Gross income tax at slab rate	17,000	8,500	10,500
Add: Surcharge	Nil	Nil	Nil
Add: Education Cess @ 2%	340	170	210
Add : SHEC @ 1%	170	85	105
	17,510	8,755	10,815
Less: Rebate on share of profit from firm at the average rate	15,881	6,471	9,213
Tax payable	1,629	2,284	1,602
Tax payable rounded off (u/s 288B)	**1,630**	**2,280**	**1,600**

Note 1: 17,510 ÷2,15,000 X 195000 = 15881

Note 2: 8,755 ÷ 172500 X 1275000 = 6471

Note 3: 10815 ÷ 202500 X 172500 = 9213

Case (b) where AOP is taxed at maximum marginal rate:

	G	M	K
1. Share of profit from AOP; Since the AOP was assessed at the maximum marginal rate, share of income from AOP is exempt (Sec. 86)	—	—	—
2. Personal income:			
Income from other sources	1,00,000	1,20,100	1,10,000
Less: Deduction u/s 80C	(-) 20,00	(-) 20,000	(-) 20,000
Total income	80,000	1,00,100	90,000
	Nil	Nil	Nil
Total Income	Nil	Nil	Nil

Question No.19 (b)

T and Q are individuals, who constitute an association of persons, sharing profit and losses in the ratio of 2:1. For the accounting year ending 31st March 2011, the profit and loss account of the business was as under:

Particulars	Rupees in thousand	Particulars	Rupees in thousands
Cost of goods sold	6,250.00	Sales	9,900.00
Remuneration to:		Dividend from companies	25.00
T	130.00		
Q	170.00	Long-term Capital gains	1,640.00
Employees	256.00		
Interest to :			
T	48.30		
Q	35.70		
Other expenses	111.70		
Sales-tax penalty due	39.00		
Net profit	4,524.30		
	11,565.00		11,565.00

Additional information furnished:

(i) Other expenses included:

(a) entertainment expenses of ₹ 35,000;

(b) wristwatches costing ₹ 2,500 each were given to 12 dealers, who had exceeded the sales quota prescribed under a sales promotion scheme;

(c) employer's contribution of ₹ 6,000 to the Provident Fund was paid on 14th January 2011.

(d) ₹ 30,000 was paid in cash to an advertising agency for publicity.

(ii) Outstanding sales tax penalty was paid on 15th April 2011. The penalty was imposed by the sales tax officer for non-filing of returns and statements by the due dates.

(iii) T and Q had, for this year, income from other sources of ₹ 3,50,000 and ₹ 2,10,000, respectively.

Required to:

(i) Compute the total income of the AOP for the previous year 2010-2011.

(ii) Ascertain the tax liability of the Association for that year; and

(iii) Ascertain the tax liability for that year of the individual members.

Solution : **(a)(i) Computation of total income of the AOP for PY 2010-2011**

Particulars	₹	₹
Profit and gains of business (see Working Note below)		33,12,300
Long term capital gain		16,40,000
Income from other sources [dividend is exempt u/s 10(34), assuming it is from domestic companies]		
Total Income		**49,52,300**
Computation of Profits and Gains of business:		
Net profit as per profit and loss account		45,24,300
Add: Inadmissible payments:		
Interest to members T & Q (₹ 48,300 + ₹ 35,700)	84,000	
Advertising [disallowance u/s 40A(3)	30,000	
Remuneration to members T & Q (₹ 1,30,000 + ₹ 1,70,000)	3,00,000	
Sales tax penalty due (See Note 3 below)	39,000	4,53,000
		49,77,300
Less : Income not taxable under this head		
Dividend from companies	25,000	
Long term capital gain	16,40,000	16,65,000
Profits and gains of business		**33,12,300**

(ii) Computation of Tax Liability of the AOP for PY 2010-2011

Particulars	₹	₹
Long-term capital gain (₹ 16,40,000 × 20%)		3,28,000
Other income (₹ 33,12,300 × 30%)		9,93,690
Tax on total income		13,21,690
Add : Surcharge @ 10%		1,32,169
		14,53,859
Add : Education cess @ 2%		29,077
Add : SHEC @ 1%		14,539
Total tax due		**14,97,445**
Total Tax Rounded off (u/s 288B)		**14,97,440**

Note:

1. Since one of the members has individual income more than the basic exemption limit, the AOP will be assessed at the maximum marginal rate. The maximum marginal rate includes the surcharge applicable in

relation to the highest slab of income in case of an individual and as such surcharge shall be chargeable at the rate of 10%.

2. Since the employer's contribution to PF has been paid during the previous year 2010-2011 itself, it is allowable as deduction.
3. Penalty imposed for delay in filing sales tax return is not deductible since it is on account of infraction of the law requiring filing of the return within the specified period.

(iii) Computation of tax liability of members T & Q for the PY 2010-2011

Particulars	₹	Particulars	₹
Tax on ₹ 3,50,000	54,000	Tax on ₹ 2,10,000	16,000
Add : Surcharge	Nil		Nil
	54,000		16,000
Add : Education cess @ 2%	1,080		320
Add : SHEC @ 1%	540		160
Net Tax Payable	**55,620**		**16,480**

Question No.19 (c)

Shri Dubbawala Charitable Trust (Regd.) submits the particulars of its income/outgoing for the previous year 2010-2011 as below :

		₹
(i)	Income from property held under trust for charitable purposes:	10,00,000
	(₹ 5,20,000 out of ₹ 10,00,000 is received in PY 2011-2012)	
(ii)	Voluntary contributions (out of which ₹ 50,000 will form part of the corpus)	2,00,000

The trust spends ₹ 2,77,500 during the previous year 2010-2011 for charitable purposes. In respect of ₹ 5,20,000, it has exercised its option to spend it within the permissible time-limit in the year of receipt or in the year, immediately following the year of receipt.

The trust spends ₹ 2,00,000 during the previous year 2009-2010 and ₹ 1,00,000 during the previous year 2011-2012. Compute and discuss the chargeability of the income of the trust.

Solution :

(a) Computation of taxable income and tax liability of the charitable trust for the PY 2010-2011/AY 2011-2012

	Particulars		₹
(i)	Income from property held under trust for charitable purposes		10,00,000
(ii)	Voluntary contributions (₹ 2,00,000 - ₹ 50,000)		1,50,000
			11,50,000
	Less: 15% set apart for future application		1,72,500
	Balance		9,77,500
	Less: Amount spent during the previous year for charitable purposes		2,77,500
	Balance		7,00,000
	Less: Income not received during the previous year 2010-2011		5,20,000
	Taxable income		**1,80,000**
	Tax payable:	Rate of tax	
	1,10,000	Nil	nil
	40,000	10%	4,000
	30,000	20%	6,000
			10,000
	Add: Education Cess @ 2%		200
	Add: SHEC @ 1%		
			100

	Tax payable		10,300
(b)	Previous year 2011-2012/AY 2012-2013		
	Income received during the previous year 2010-2011	5,20,000	
(i)	Amount spent for charitable purposes during PY 2010-2011	2,00,000	
(ii)	Amount spent for charitable purposes during 2011-2012	1,00,000	
	Taxable income	**2,20,000**	

Question No.19 (d)

Shri Mungeri Ram Temple Trust (Regd.) derived ₹ 6,00,000 income from the property held under charitable trust during the previous year 2010-2011. About 40% of the income has been received by the end of the financial year. The trust could spend ₹ 60,000 for charitable purposes during the year 2010-2011 and 40% receipts, received by the year end in 2010-2011, are being planned to be applied for charitable purposes during the previous year 2011-2012. Compute its income for the said two years if the amount planned to be spent during previous year 2011-2012 for charitable purposes is ₹ 1,00,000.

Solution :

Computation of Taxable Income of Charitable Trust: PY 2010-2011/AY 2011-2012.

Particulars	₹
Income from property held under trust	6,00,000
Less: 15% set apart for future application for charitable purposes	90,000
Balance	5,10,000
Less : Income applied for charitable purposes during the year 2010-2011	60,0000
Balance	4,50,000
Less: Income realised by the close of the previous year—40% of ₹ 6,00,000	2,40,000
Taxable income	**2,10,000**

(b) Previous year : 2009-2010/AY 2010-2011

Amount set apart in 2010-2011 to be applied for charitable purposes in 2011-2012	= 2,40,000
Less: Amount applied for charitable purposes	= 1,00,000
Taxable income	**1,40,000**

Question No.19(e)

Devdas Charitable Trust submits the particulars of its receipts and outgoing during the previous year 2010-2011. as below :

		₹
(i)	Income from property held under trust for charitable purposes	20,00,000
(ii)	Voluntary contribution (out of which ₹ 5,00,000 will form part of the corpus)	15,00,000
(iii)	Donations paid to blind charitable school	6,00,000
(iv)	Scholarship paid to poor students	4,00,000
(v)	Amount spent on holding free eye camps in urban slums	3,00,000
(vi)	Amount set apart for setting up an old age home by March 2013	10,00,000

Compute the total income of the trust for the previous years 2009-2010 and 2014-2015 if it spends ₹ 5,00,000 during the previous year 2013-2014 and ₹ 3,00,000 during the previous year 2014-2015 in setting up the old age home.

Solution :

Computation of the Taxable Income of the trust for previous year 2010-2011/AY 2011-2012.

	Particulars		₹
(i)	Income from property held under charitable trust		20,00,000
(ii)	Income from voluntary contributions (₹ 15,00,000-₹ 5,00,000)		10,00,000
	Total		**30,00,000**
	Less: 15% set apart for future application		45,00.000
	Balance		**25,50,000**
	Less: Income applied for charitable purposes:		
(i)	Donations to blind charitable school	6,00,000	
(ii)	Scholarship to poor students	4,00,000	
(iii)	Free eye camps in urban slums	3,00,000	
	Total	**13,00,000**	
	Amount set apart for old age home	**10,00,000**	23,00,000
	Taxable income		**2,50,000**
(b)	Previous year 2014-2015 /AY 2015-2016:		
	Amount set apart for old age home	10,00,000	
Less:			
1.	Amount spent during 2013-2014	3,00,000	
2.	Amount spent during 2014-2015	5,00,000	
	Taxable income	**2,00,000**	

Question No.19 (f)

Dinesh Pally Cooperative Society Ltd. furnishes the following particulars of its income for the previous year ended 31st March 2011:

(i)	Interest on government securities	40,000
(ii)	Profits from banking business	3,50,000
(iii)	Income from purchase and sale of agricultural implement and seeds to its members	2,50,000
(iv)	Income from marketing of agricultural produce of its members	4,00,000
(v)	Profits and gains of business	2,20,000
(vi)	Income from cottage industry	3,50,000
(vii)	Interest and dividends (gross) from other cooperative societies	30,000

Compute total income of the society and calculate the tax payable by it for the assessment year 2011-2012.

Solution :

Dinesh Pally Cooperative Society Ltd.

Computation of income of the for the previous year 2010-2011 relating to the Assessment Year 2011-2012 :

Particulars	₹	₹
1. Profits and gains of business or profession:		
a) Banking business	3,50,000	
b) Income from purchase and sale of agricultural implements and seeds to its members	2,50,000	
c) Income from marketing of agricultural produce of its members	4,00,000	
d) Profits and gains of business	2,20,000	

	e) Income from cottage industry	3,50,000	15,70,000
2.	Income from other sources:		
	a) Interest on government securities	40,000	
	b) Interest and dividends from other cooperatives	30,000	70,000
	Gross Total Income		**16,40,000**
	Less: Deduction allowable from gross total income under Sec. 8OP		
1.	Banking business	3,50,000	
2.	Income from purchase and sale of agricultural implement and seeds to its members	2,50,000	
3.	Income from marketing of agricultural produce of its members	4,00,000	
4.	Income from cottage industry	3,50,000	
5.	Interest on government securities(not eligible for deduction)	Nil	
6.	Interest and dividends from other cooperative societies	30,000	13,80,000
	Total Income		**2,60,000**

Computation of Tax Liability:

Particulars	Rate	₹
On first ₹ 10,000	10%	1,000
On next ₹ 10,000	20%	2,000
On balance ₹ 2,40,000	30%	72,000
Income tax payable		75,000
Add: Education cess @ 2%		1,500
Add: SHEC @ 1%		750
Tax payable		**77,250**

Question No.20 (a)

The following details have been supplied by the Karta, of an HUF aged 67 years. You are required to compute its total income and tax liability for the assessment year 2011-2012.

	Particulars	₹
(i)	Profits from business (after charging ₹ 1,00,000 salary to Karta for managing the business).	15,00,000
(ii)	Salary received by the member of a family.	60,000
(iii)	Director's fee received by Karta from B Ltd where HUF holds 20% shares but he became director because of his qualifications,	40,000
(iv)	Rental income from house property (after deduction of municipal taxes ₹ 2,000).	78,000
(v)	Dividends (gross) from Indian companies	15,000
(vi)	Long-term capital gain	80,000
(vii)	Short-term capital gain	30,000
(viii)	Donation to a school, which is an approved institution,	1,00,000
(ix)	Deposits in Public Provident Fund	20,000
(x)	NSC-VIII issues purchased	40,000

Solution: Computation of Total Income for the A.Y. 2011-12

Particulars	₹	₹
(i) Income from house property:		
Gross annual value (₹ 78,000 + ₹ 12,000)	90,000	
Less: Municipal taxes paid	12,000	
Annual value	78,000	
Less: Statutory deduction: 30% ×78,000	23,400	54,600
(ii) Profits and gains from business		15,00,000
(iii) Capital gains (a) long-term + (b) short-term		1,10,000
(iv) Income from other sources—gross dividends from Indian companies: Exempt [Sec. 10(34)]		Nil
Gross total income		**16,64,600**
Less:		
1. Contribution to approved savings (Sec. 80C)		
(i) Deposits in Public Provident Fund	20,000	
(ii) NSC-VIII Issue	40,000	60,000
2. Donation to recognised school:		
(a) Actual donation: ₹ 1,00,000 or		
(b) 10% of adjusted total income = (Gross Total Income – Long Term Capital Gains – All deductions under Chapter VIA excluding Sec. 80G) of ₹ 15,24,600 (16,64,600 - 80,000 - 60000) whichever is less, is qualifying amount.		
Amount of deduction: : 50% of ₹ 1,00,000	50,000	1,10,000
Total Income		**15,54,600**

Computation of tax liability:

Particulars of total income	Rate of income tax ₹	₹	₹
(a) Long-term capital gain	80,000	20%	16,000
(b) Balance of total income: ₹ 14,74,600			
(i) First	2,40,000	Nil	–
(ii) Between 2,40,000 – 5,00,000	3,60,000	10%	26,000
(iii) Between 5,00,000 – 8,00,000	3,00,000	20%	60,000
(iv) Between 8,00,000 – 14,74,600	6,74,600	30%	2,02,380
Gross income tax			**3,04,380**
Add: Education cess @ 2% on income tax			6,088
SHEC @ 1% on income tax			3,044
Tax payable			**3,13,512**
Rounded off u/s 288B			**3,13,510**

Question No.20 (b)

From the following information, determine the tax liability of Z Ltd., domestic company, for the assessment year 2010-2011 and 2011-2012.

Assessment year	Book-profits (₹)	Total income (₹)
2010-2011	2,80,000	1,30,000
2011-2012	3,00,000	2,00,000

Solution :

Surcharge is not considered assuming, net income less than Rs. 1 crore

Assessment year	Book-profit	Total Income	Tax on Book-Profit	Tax on Total Income @ 30.9% rounded off u/s 288B	Tax Credit = Tax on Book Profits (–) Tax on Total Income	Tax Payable after tax credit set off, if any	Tax credit balance
	₹	₹	₹	₹	₹	₹	₹
2010-2011	2,80,000	1,30,000	@ 15.45% on 2,80,000 = 43,260	@ 30.9% on 1,30,000 = 40,170	3,090	43,260	3,090
2011-2012	3,00,000	1,50,000	@ 18.54% on 3,00,000 = 55,620	@ 30.9% on 2,00,000 = 61,800	—	58,710 [61,800 – 3,090]	—

Note : Tax payable is rounded off to the nearest multiple of ₹ 10 (Sec. 288B)

Question No.20 (c)

Classic Exporters Ltd, runs a new industrial undertaking set up in 2005-2006 which satisfies the conditions of Sec. 80-IB. Given below is the profit and loss account for the previous year 2010-2011.

Particulars	₹	Particulars	₹
Stock	4,00,000	Domestic sales	24,00,000
Purchases	23,00,000	Export sales	43,00,000
Salaries and wages	9,70,000	Export incentives Sec. 28(iiia)/(iiic)	50,000
Entertainment expenses	1,30,000	Profit of foreign branch	2,50,000
Freights and insurance attributable to exports	3,00,000	Brokerage/commission/interest/ rent, etc	50,000
Travelling expenses	2,20,000	Transfer from contingency reserve	10,00,000
Depreciation	1,50,000	Stock	3,50,000
Selling expenses	1,20,000		
Income tax paid	90,000		
Income-tax penalty	20,000		
Wealth tax paid	10,000		
Custom duty payable against demand notice	30,000		
Provision for unascertained liabilities	20,000		
Provision for ascertained liabilities	50,000		
Proposed dividend	3,00,000		
Loss of subsidiary company	50,000		
Net profit	32,40,000		
	84,00,000		**84,00,000**

You are further informed:

(i) Excise duty for 2009-2010, amounting ₹ 1,20,000 was paid on 15 December 2010.

(ii) Depreciation under Sec. 32 is ₹ 2,20,000.

(iii) During the year 2007-2008, contingency reserve, amounting ₹ 10,00,000, debited to profit and loss a/c, was added back to the extent of ₹ 4,00,000 in the computation of book-profits. The company has transferred the said reserve to the profit and loss a/c during the year.

(iv) Brought forward business loss/depreciation:

PY	Accounting purposes		Tax purposes	
	Loss	Depreciation	Loss	Depreciation
2006-2007	(-) 10,00,000	(-) 1,00,000	(-) 5,00,000	(-) 2,50,000
2007-2008	(-) 2,00,000	(-) 3,00,000	(-) 1,00,000	(-) 2,00,000

Compute the following: (a) Total income, (b) Book-profits and (c) Tax liability.

Solution:

Computation of Total Income for the AY 2011-2012

Particulars	**₹**	**₹**
Net profit as per Profit & Loss A/c		32,40,000
Add : Expenses debited to P/L A/c – disallowed		
(i) Income tax	90,000	
(ii) Wealth tax	10,000	
(iii) Custom duty payable	30,000	
(iv) Provision for unascertained liability	20,000	
(v) Proposed dividend	3,00,000	
(vi) Loss of subsidiary company	50,000	
(vii) Income-tax penalty	20,000	5,20,000
		37,60,000
Less : Allowable Expenses and wrong credits in P/L A/c		
(i) Withdrawals from contingency reserve	10,00,000	
(ii) Excise duty	1,20,000	
(iii) Depreciation	70,000	
(iv) Brokerage, commission, interest and rent, etc.	50,000	12,40,000
Business Profits		**25,20,000**
Add: Income from other sources: Brokerage/ commission, etc.		50,000
Aggregate income		**25,70,000**
Less: (i) Brought forward losses (Sec. 72)	6,00,000	
(ii) Brought forward depreciation [Sec. 32(2)]	4,50,000	10,50,000
Gross Total Income		**15,20,000**
Less: Profit from industrial undertaking Sec. 80IB: 30% of ₹ 15,20,000 as included in GTI		4,56,000
Total Income		**10,64,000**

(b) Computation of Book Profits for the AY 2011-2012

Particulars	**₹**	**₹**
Net profits as per Profit & Loss A/c		32,40,000
Add : Expenses disallowed		
(i) Income tax	90,000	
(ii) Provision for unascertained liability	20,000	
(iii) Proposed dividend	3,00,000	
(iv) Loss of subsidiary	50,000	4,60,000
		37,00,000

Less : Allowable expenses and wrong credit in P & L A/c			
(i)	Withdrawals from contingency reserve	4,00,000	
(ii)	Brought forward business loss or depreciation whichever is less		
	2006-2007 Depreciation	1,00,000	
	2007-2008 Loss	2,00,000	7,00,000
Book-Profits			**30,00,000**

(c) Computation of Tax liability for the AY 2011-2012

	Particulars	₹
(a)	Tax on Total Income (including Education Cess and SHEC)	
	= 30.9% of 10,64,000	3,28,776
(b)	Tax on Book Profits (including Education Cess and SHEC)	
	= 18.54% on 30,00,000	5,56,200
Tax payable		**5,56,200**

Note :

(i) No adjustment is required for depreciation debited to profit and loss a/c because it is not on account of revaluation of any asset.

(ii) MAT credit available ₹ (5,56,200 – 3,28,776) = ₹ 2,27,424

Question No.21 (a)

A firm made the following payments of advance tax during the Financial Year 2010-11 :

	Figures in ₹ Lakhs
15.09.2010	9.30
15.12.2010	9.0
15.03.2011	13.9
	32.20

The income returned by the firm is ₹ 100 Lakhs under the head "Business" and ₹ 10 Lakhs by way of Long-term Capital Gains on sale of a property effected on 1.3.2011. What is the interest payable by the assessee u/s 234B and 234C of the Income Tax Act for Assessment Year 2011-2012? Assume that the return of income was filed on 31.07.2011 and tax was fully made upon self-assessment.

Solution :

Assessee : Firm **Previous Year : 2010-2011** **Assessment Year : 2011-2012**

(a) **Interest u/s 234B = Nil** [since more than 90% of Tax Payable has been paid before the end of the previous year]

(b) **Interest u/s 234C**

Due date	Advance Tax Payable	Advance Tax paid	Cumulative Advance Tax paid before due date	Shortfall in Payment	Surplus	Months	Interest @ 1% p.m.
	₹	₹	₹	₹	₹		₹
15.9.2010	30% of ₹ 30,90,000 = 9,27,000	9,00,000	9,30,000	—	3,000	—	—
15.12.2010	60% of ₹ 30,90,000 = 18,54,000	9,00,000	18,30,000	24,000	—	3	720
15.3.2011	100% of ₹ 32,96,000 = 32,96,000	13,90,000	32,20,000	76,000	—	1	760
							1,480

Note : Tax on LTCG has been considered only for the 3rd instalment as such gain had arisen only on 1.3.2010.

Computation of Actual Tax Payable by the Firm :

Particulars		**₹**
Profits and Gains of Business or Profession		1,00,00,000
Capital Gains — Long Term Capital Gain		10,00,000
Total Income		**1,10,00,000**
Tax on Total Income including Surcharge and Cess		
On Long Term Gain of ₹ 10 lakhs @ 20%+ EC @ 2%+ SHEC @ 1%	2,06,000	
On Business Income @ of ₹ 100 lakhs @ 30%+ EC @ 2%+ SHEC @ 1%	30,90,000	
Net Tax Payable		**32,96,000**

Note : Tax on Business income alone considered for computation of 1st and 2nd instalment.

Question No.21 (b)

A firm made the following payments of advance tax during the financial year 2010-11 :

	₹ in lakh
September 15, 2010	7.00
December 15, 2010	7.75
March 15, 2011	13.00
	27.75

The return of income is filed on 31.7.2011 showing —

Bonus income	₹ 80 lakh
Long term capital gain taxable @ 20% (as on 1.12.2010)	₹ 20 lakh

Compute interest payable u/s 234C.

Solution :

Computation of Tax Liability for A.Y. 2011-12.

₹ in lakh

Particulars	**Business income**	**Long term capital gain**
Income	80.00	20.00
Tax rate	30%	20%
Tax liability before surcharge	24.00	4.00
Add : Education Cess & SHEC	0.72	0.12
Tax liability including cess	24.72	4.12

Total Tax Liability = (24.72 + 4.12) lakhs = ₹ 28.94 lakhs.

Computation of interest payable u/s 234

Due date	**Advance Tax Payment**	**Advance Tax paid**	**Cumulative Advance Tax paid before due date**	**Shortfall in Payment**	**Surplus**	**Months**	**Interest @ 1% p.m.**
	₹	₹	₹	₹	₹		₹
15.9.2010	30% of ₹ 24,72,000 = 7,41,600	7,00,000	7,00,000	41,600	—	3	1,248
15.12.2010	60% of ₹ 24,72,000 = 14,83,200 (+) 60% of 4,12,000 = 2,47,200	7,75,000	14,75,000	2,55,400	—	3	7,662

15.3.2011	100% of ₹ 28,94,000 = 28,94,000	13,00,000	27,75,000	1,19,000	—	1	1,190
							10,100

Question No.21(c)

In the case of Ms. Laxmi, you are required to compute the interest u/s 234A, 234B & 234C from the following details: Tax on total income ₹ 2,00,000; Due date for filing the return 30.09.2011; Actual date of filing the return 1.10.2012 and tax paid on 30.09.2011 ₹ 2,00,000.

Solution :

Computation of interest u/s 234A

Particulars	**As per assessed income**
Tax	₹ 2,00,000
Less : Advance tax paid	Nil
TDS	Nil
Amount on which interest is payable	₹ 2,00,000
Period of default (October being part of a month shall be considered)	1 month
Interest u/s 234A (1% × ₹ 2,00,000 × 1 month)	**₹ 2,000**

Computation of Interest u/s 234B

Since assessee did not pay any amount by way of advance tax, hence she is liable to pay interest u/s 234B.

Particulars	**Assessed income**
Shortfall	₹ 2,00,000
Period of default (From April to September)	6 months
Interest (1% × 2,00,000 × 6 months)	**₹ 12,000**

Computation of Interest u/s 234A

Due date	**Advance Tax Payment**	**Advance Tax paid**	**Cumulative Advance Tax paid before due date**	**Shortfall in Payment**	**Surplus**	**Months**	**Interest @ 1% p.m.**
	₹	₹	₹	₹	₹		₹
15.9.2010	30% of ₹ 2,00,000 = 60,000	Nil	Nil	60,000	—	3	1,800
15.12.2010	60% of ₹ 2,00,000 = 1,20,000	Nil	Nil	1,20,000	—	3	3,600
15.3.2011	100% of ₹ 2,00,000 = 2,00,000	Nil	Nil	2,00,000	—	1	2,000
							7,400

Total interest payable

Particulars	**Amount**
U/s 234A	2,000
U/s 234B	12,000
U/s 234C	7,400
Total	**21,400**

Question No.21 (d)

During the financial year 2010-11, Mrs. X (aged 46 years) pays the following instalments of advance tax :

	₹
On September 15, 2010	6,000
On December 15, 2010	14,000

On March 15, 2011	16,000
On March 16, 2011	18,000

Mrs. X files return of ₹ 7,01,000. Assessment is also completed on the basis of income returned by Mrs. X after making addition of ₹ 25,000 (date of assessment order : January 20, 2012). Mrs. X is entitled to tax credit of ₹ 12,510 on account of tax deducted at source. Compute interest under sections 234B and 234C.

Solution :

Interest liability under section 234B

	₹
Income (7,01,000 + 25,000) =	7,26,000
Tax on ₹ 7,26,000	76,200
Less : Tax deducted at source	12,510
Assessed tax	63,690
90% of assessed tax	**57,321**

Advance tax paid during 2010-11 (i.e., ₹ 6,000 + 14,000 + 16,000 + 18,000) = ₹ 54,000.

Since advance tax during the financial year 2010-11 is less than 90% of assessed tax, Mrs. X is liable to pay interest under section 234B, i.e., on the shortfall of ₹ 9,690 (being ₹ 63,690 – 54,000) for 10 months (₹ 9,690 × 1/100 × 10) which comes to ₹ 969.

Interest liability under section 234C

Tax on ₹ 7,01,000 =

Due date	**Advance Tax Payment**	**Advance Tax paid**	**Cumulative Advance Tax paid before due date**	**Shortfall in Payment**	**Surplus**	**Months**	**Interest @ 1% p.m.**
	₹	₹	₹	₹	₹		₹
15.9.2010	30% of ₹ 71,200 = 21,360	6,000	6,000	15,360	—	3	461
15.12.2010	60% of ₹ 71,200 = 42,720	14,000	20,000	22,720	—	3	682
15.3.2011	100% of ₹ 71,200 = 71,200	34,000	54,000	17,000	—	1	172
							1,315

Question No. 21 (e)

Compute the Advance Tax payable by R from the following estimated income submitted for the financial year 2010-11.

		₹
(1)	Income from Salary	3,64,000
(2)	Rent from house property (per annum)	1,80,000
(3)	Interest on Government securities	5,000
(4)	Interest on bank deposits	3,000
(5)	Receipt from horse race (net)	14,000
(6)	Agricultural Income	90,000
(7)	Contribution towards PPF	10,000

Tax deducted at source by the employer on salary is ₹ 9,680.

Solution :

Computation of Estimated Total Income for the Previous Year 2010-11

	₹	₹
Income from Salary :		
Gross salary	3,64,000	
Less : Deduction	Nil	3,64,000
Income from House Property :		
Rent received	1,80,000	
Less : (Statutory deduction u/s 24(*a*) @ 30%)	54,000	1,26,000
Income from Other Sources :		
Interest on Government securities	5,000	
Interest on Bank Deposit	3,000	
Horse Races (Gross)	20,000	28,000
Estimated Gross Total Income		5,18,000
Less : Deduction under section 80C		10,000
		5,08,000
Estimated Tax :		
Step-1 : Aggregate of Agricultural income + Non-Agricultural income (90,000 + 5,08,000) = 5,98,000		
Tax on : Income from Horse Race of ₹ 20,000 @ 30%	6,000	
Balance income of ₹ 5,78,000	49,600	
		55,600
Step-2 : Aggregate of Basic exemption limit of agricultural income (1,60,000 + 90,000) = 2,50,000		
Tax on ₹ 2,50,000		9,000
Step-3 : Tax on non-agricultural income		
Tax under step-1 - Tax under step-2 (55,600 – 9,000) = 46,900		
Estimated tax payable		46,900
Add : Education cess @ 2%		938
Add : SHEC @ 1%		469
		48,307
Less : Estimated TDS		
on salary	9,680	
on horse races	6,000	15,680
Advance tax payable (rounded off)		32,627
First installment payable by 15.9.2010 (30%)		9,788
Second installment payable by 15.12.2010 (30%)		9,788
Third installment payable by 15.3.2011 (balance 40%)		13,051

Working notes :

Computation of gross winnings from horse races :	₹
Net Amount	14,000
Grossing up	20,000
Tax deducted at source (Gross amount ₹ 20,000 – Amount received ₹ 14,000)	6,000

Question No.22 (a)

X Ltd. estimates its income for the previous year 2009-10 at ₹ 1,20,000. Besides this income, it has also earned long-term capital gain of ₹ 80,000 on transfer of gold on 1.12.2010. Compute the advance tax payable by the company in various instalments.

Solution :

	₹
Tax on ₹ 1,20,000 @ 30%	36,000
LTCG of ₹ 80,000 @ 20%	16,000
	52,000
Add : Education cess @ 2%	1,040
SHEC @ 1%	520
	53,560

Amount payable on 1st and 2nd instalment

For the first two instalments tax on LTCG will not be taken into account as this accrued on 1.12.2010 *i.e.* after the due date of the first 2 instalments.

	₹
Tax including Education Cess and SHEC payable without Long-term Capital Gain (₹ 36,000 + 720 +360)	37,080

Advance Tax Payable

Due Date	**Tax Liability as on due date**	**Amount of Instalment Payable (₹)**
15.6.2010	15% of 37,080 = 5,562	₹ 5,562
15.9.2010	45% of 37,080 = 16,680	= 16,680 – 5,560 = 11,118
15.12.2010	75% of 53,560 = 40,170	= 40,170 – 5,562 – 11,118 = 23,490
15.3.2011	100% of 53,560 = 53,560	= 53,560 – 5,562 – 11,118 – 23,490 = 13,390

Question No.22 (b)

Find out the amount of advance tax payable by ABC Ltd. on specified dates for the financial year 2010-11 :

Business income	₹ 1,75,000
Long term capital gain on 31-7-2010	₹ 3,50,000
Bank interest	₹ 10,000
TDS on business income	₹ 19,995

Solution :

Computation of Total Income of ABC Ltd. for the Previous Year 2010-11

Particulars	**Amount** ₹
Profits and gains of business or profession	1,75,000
Capital gains: Long term capital gains	3,50,000
Income from other sources: Bank Interest	10,000
Total Income	**5,35,000**

Computation of Tax Liability of ABC Ltd. for the Previous Year 2010-11

Particulars	Long term capital gain ₹	Other income ₹
Income	3,50,000	1,85,000
Tax rate	20%	30%
Tax on above	70,000	55,500
Add : Education Cess & SHEC	2,100	1,665
Tax and Cess payable	72,100	57,165
Less : TDS	—	19,995
Advance tax payable	**72,100**	**37,170**

Advance tax to be paid on specified dates

	Advance tax on LTCG		Advance tax on income other than LTCG		
Date	**Workings**	**Amount (a) ₹**	**Workings**	**Amount (b) ₹**	**Total (a+b) ₹**
15.06.2010	As LTCG occurred on 31.7.10	Nil	15% of ₹ 37,170	5,576	5,576
15.09.2010	45% of ₹ 72,100	32,445	30% of ₹ 37,170	11,151	43,596
15.12.2010	30% of ₹ 72,100	21,630	30% of ₹ 37,170	11,151	32,781
15.03.2011	25% of ₹ 72,100	18,025	25% of ₹ 37,170	9,292	27,317
Total		**72,100**		**37,170**	**1,09,270**

Question No.22 (c)

Find out the amount of advance tax payable by Mr. A on specified dates under the Income tax Act, 1961 for the Previous Year 2010-11 :

	₹
Business income	2,75,000
Long term capital gain on 31-7-2010	60,000
Winning from lotteries on 12-9-2010	50,000
Bank interest	10,000
Other income	5,000
Investment in PPF	40,000
Tax deducted at source :	
Case I	48,000
Case II	25,000

Solution :

Computation of Total Income of Mr. A for the previous year 2010-11

Particulars	Details	Amount
Profits and gains of business or profession		2,75,000
Capital gains : Long term capital gains		1,60,000
Income from other sources		
Winning from lotteries	50,000	
Bank interest	10,000	
Other income	5,000	65,000
Gross Total Income		5,00,000
Less : Deduction u/s 80C — Deposits in PPF		40,000
Total Income		**4,60,000**

Computation of Tax liability of Mr. A for the previous year 2010-11

Income	Case 1	Case 2
Long term capital gain (₹ 1,60,000 @ 20%)	32,000	32,000
Winning from lotteries (₹ 50,000 @ 30%)	15,000	15,000
Balance income (₹ 2,50,000)	9,000	9,000
Tax	56,000	56,000
Add : Education Cess & SHEC	1,680	1,680
	57,680	57,680
Less : Tax Deducted at Source	48,000	25,000
Total Tax Payable	**9,680**	**32,680**

Advance tax to be paid on specified dates —

Case I : Since amount of tax payable is less than ₹ 10000, assessee is not liable to pay advance tax.

Case II : Advance Tax Payable

Due Date	Tax Liability (₹)	Amount of Instalment (₹)
15.6.2010	30% of 32,680 = 9,804	9,804
15.9.2010	60% of 32,680 = 19,608	= 19,608 – 9,804
		= 9,804
15.12.2010	100% of 32,680 = 32,680	= 32,680 – 9,804 – 9,804
		= 13,072

Question No. 23(a)

State the responsibilities and liabilities of Tax collector.

Answer:

Responsibility & Liability of the Tax Collector

1. To obtain Tax Collection Account No. [sec. 206CA(1)]
2. To quote TCS No. in all returns, certificates and challans. [Sec. 206CA(2)]
3. To furnish quarterly return in form No. 27EQ within stipulated time i.e. within fifteen days from the end of a quarter for the first three quarters and by 30th April for the last quarter.
4. Failure to furnish TCS return: Penalty @ 100/- per day, during which the default continues, but not exceeding the amount of TCS. [sec. 272A(2)(g)]
5. Failure to deposit TCS in Government treasury, rigorous imprisonment for a term of not less than 3 months, but which may extend to 7 years, in addition to fine [Sec. 276B & 276BB]

Thus, administrative provisions are similar to TDS administration.

Question No. 23 (b)

Discuss procedures in Advance Ruling.

Answer:

Finance Act, 1993 inserted a chapter XIX-B in the Income-tax Act, 1961 to provide provisions of **Advance Rulings** to avoid dispute in respect of assessment of Income-tax liability in the case of non-resident. W.e.f. 1.10.1998, the scheme has been extended to cover notified resident applicants also. The chapter XIX-B contains sections 245N to 245V.

'Advance Ruling' means a determination by the Authority for Advance Rulings, in relation to (i) a transaction which has been undertaken or is proposed to be undertaken by a non-resident or by a resident with a non-resident, including a determination of a question of law or of fact, and (ii) issues relating to computation of income pending before the income-tax authority or the tribunal including a determination of a question of a law or of fact. [Sec. 245N (a)]

An application may be made by (i) non-resident, (ii) a resident entering into transaction with a non-resident, or (iii) a resident of the notified class or category i.e. a public sector company or a person indulging in a transaction with a non-resident. [Sec. 245N (b)]

Application for advance ruling should be in the prescribed form as below duly verified, along with a payment of fee of Rs. 2,500 shall be submitted to the authority for advance rulings.

Form No.	Classes of Assessees
34C	Non- resident desires of obtaining an advance ruling.
34D	Resident persons seeking advance ruling in relation to a transaction with a non-resident.
34E	Resident person of notified class or category.

The application for advance rulings should be in quadruplicate and the applicant may withdraw such application within 90 days from the date of application. [Sec. 245Q]

An advance ruling shall not be allowed where (i) question of law or fact is already pending either before any income-tax authority or the Appellate Tribunal (except in case of a resident applicant of notified class or category) or any court, (ii) a transaction, which is designed for the avoidance of income-tax; or (iii) determination of the fair market value of any property. However, no application shall be rejected unless an opportunity has been given to the applicant of being her and if the application is rejected, reasons for such rejection shall be given in the order. [Sec. 245R]

The Authority shall pronounce the advance ruling within six months after the receipt of the application. [Sec. 245R (6)]

In case an application for advance ruling has been made, in respect of an issue by a resident applicant, no Income-tax authority or the Appellate Tribunal shall give a decision on the same issue. [Sec. 245RR]

The advance ruling shall be binding only on the applicant who has sought it in respect of the specific transaction covered thereunder, on the Commissioner and the income-tax authorities subordinate to him, having jurisdiction over the applicant. The advance ruling will continue to remain in force unless there is a change either in law or in fact on the basis of which the advance ruling was pronounced. [Sec. 245S]

Question No. 23 (c)

State the hierarchy of Income Tax Authorities

Answer:

INCOME TAX AUTHORITIES [Sec. 116]

In order to discharge executive and administrative functions relating to the Act, the following income-tax authorities have been constituted –

(a) The Central Board of Direct Taxes;
(b) Directors General of Income-tax or Chief Commissioners of Income-tax;
(c) Directors of Income-tax or Commissioners of Income-tax or Commissioners of Income-tax (Appeals);
(d) Additional Directors of Income-tax or Additional Commissioners of Income-tax or Additional Commissioners of Income-tax (Appeals);
(e) Joint Directors of Income-tax or Joint Commissioners of Income-tax;
(f) Deputy Director of Income-tax or Deputy Commissioner of Income-tax or Deputy Commissioner of Income-tax (Appeals);
(g) Assistant Directors of Income-tax or Assistant Commissioners of Income-tax;
(h) Income-tax Officers;
(i) Tax Recovery Officers;
(j) Inspectors of Income-tax.

Question No. 23 (d)
Ms. Sania, a resident Indian, furnishes the details for the assessment year 2011-2012.

		₹
(1)	Income from profession	1,04,000
(2)	Share income from a partnership in country X	40,000
	(Tax paid in country X for this income in equivalent Indian rupees ₹ 8,000)	
(3)	Commission income from concern in country Y	30,000
	(Tax paid in country Y at 20% converted in Indian rupee)	
(4)	Interest from scheduled banks	20,000

Ms. Sania wishes to know whether she is eligible to any double taxation relief, if so, its quantum. India does not have any Double Taxation Avoidance Agreement with countries X and Y.

Solution :

Computation of Total Income for the A.Y. 2011-12

Particulars	₹	₹
(a) Income from Business or Profession :		
(i) Income from Profession	1,04,000	
(ii) Share income in partnership firm in country X	40,000	1,44,000
(b) Income from other sources:		
(i) Interest from schedule bank	20,000	
(ii) Commission earned in country Y, assumed from other sources	30,000	50,000
Total Income		**1,94,000**

(b) Computation of tax liability

	Particulars	₹
	Tax on Total Income of ₹ 1,94,000	400
Add:	Surcharge on income tax	Nil
	Education cess @ 2%	400
	SHEC @ 1%	8
		4
Less:	Double taxation relief : 70,000 × 0.21%	(147)
	Tax payable	**265**
	Rounded off u/s 288B	**270**

Note: (i) Average rate of tax in the foreign country : 20%

(ii) Average rate of tax in India : (412/194000 x 100) = 0.21%

Question No. 24(a)
What is Transfer Pricing?

Answer:

Transfer pricing means pricing of goods and services supplied to associated enterprises that belong to the same business group. It concerns prices charged by an enterprise for transfer of goods and services to its related enterprise.
The Organization of Economic Cooperation and Development (OECD) defines "Transfer prices" as "prices at which an enterprise transfers physical goods and intangibles or provides services to associated enterprises."

Question No.24(b)

What is Arm's Length Principle?

Answer:

The arm's length principle seeks to ensure that transfer prices between members of an MNE ("controlled transactions"), which are the effect of special relationships between the enterprises, are either eliminated or reduced to a large extent. It requires that, for tax purposes, the transfer prices of controlled transactions should be similar to those of comparable transactions between independent parties in comparable circumstances ("uncontrolled transactions"). In other words, the arm's length principle is based on the concept that prices in uncontrolled transactions are determined by market forces and, therefore, these are, by definition, at arm's length. In practice, the "arm's-length price" is also called "market price". Consequently, it provides a benchmark against which the controlled transaction can be compared.

The Arm's Length Principle is currently the most widely accepted guiding principle in arriving at an acceptable transfer price. As circulated in 1995 OECD guidelines, it requires that a transaction between two related parties is priced just as it would have been if they were unrelated. The need for such a condition arises from the premise that intra-group transactions are not governed by the market forces like those between two unrelated entities. The principle simply attempts to place uncontrolled and controlled transactions on an equal footing.

Question No. 24 (c)

J Inc. of Korea and CD Ltd, an Indian Company are associated enterprises. CD Ltd manufactures Cell Phones and sells them to J.K. & F Inc., a Company based at Nepal. During the year CD Ltd. supplied 2,50,000 Cellular Phones to J Inc. Korea at a price of Rs.3,000 per unit and 35,000 units to JK & F Inc. at a price of Rs.5,800 per unit. The transactions of CD Ltd with JK & F Inc. are comparable subject to the following considerations -
Sales to J Inc. are on FOB basis, sales to JK &F Inc. are CIF basis. The freight and insurance paid by J Inc. for each unit @ Rs.700. Sales to JK &F Inc. are under a free warranty for Two Years whereas sales to J Inc. are without any such warranty. The estimated cost of executing such warranty is Rs.500. Since J Inc.'s order was huge in volume, quantity discount of Rs.200 per unit was offered to it. Compute the Arm's Length Price and the subsequent amount of increase in the Total Income of CD Ltd, if any.

Solution:

(a) Computation of Arm's Length Price of Products sold to J Inc. Korea by CD Ltd

Particulars	Rs.	Rs.
Price per Unit in a Comparable Uncontrolled Transaction		5,800
Less: Adjustment for Differences -		
(a) Freight and Insurance Charges	700	
(b) Estimated Warranty Costs	500	
(c) Discount for Voluminous Purchase	200	(1,400)
Arms's Length Price for Cellular Phone sold to J Inc. Korea		**4,400**

(b) Computation of Increase in Total Income of CD Ltd

Particulars	Rs.
Arm's Length Price per Unit Less: Price at which actually sold to J Inc. Korea	4,400 (3,000)
Increase in Price per Unit	**1,400**
No. of Units sold to J Inc. Korea	2,50,000
Increase in Total Income of CD Ltd (2,50,000 x Rs.1,400)	**Rs.35 Crores.**

Question No. 24 (d)

State the methods of computing Arm's Length Price

Answer:

Methods of Computation [Section 92C]: The arm's length price in relation to an international transaction shall be determined by any of the following methods -

(1) Comparable Uncontrolled Price Method,
(2) Resale Price Method,
(3) Cost plus Method,
(4) Profit Split Method,
(5) Transactional Net Margin Method,
(6) Such other method as may be prescribed by the Board.

Question No.25(a)

Mr. Kushal Sengupta owns a house at Jharkhand, which is let-out at ₹1,35,000 per annum. The annual value of the property as per municipal records also is ₹1,00,000. Municipal taxes are partly borne by the owner (₹5,000) and partly by the tenant (₹6,000). Repair expenses are borne by tenant (₹10,000) the difference between the un-built area and specified area does not exceed 5%. The property was acquired on 10.5.1998 for ₹ 15,00,000.

Determine for purposes of Wealth Tax Act, the value of the property as on 31.3.2011 on the following situations

(a) The house is built on a freehold land.

(b) It is built on a leasehold land, the unexpired period of lease of the land is more than 50 years.

(c) If the area of the plot on which the house is built is 800 sq. meters. FSI, permissible is 1.4 and FSI utilised is 1088 Sq. metres. (136 Sq. metres × 8 Storeys)

(d) The tenant had made interest free deposit of ₹ 1,00,000 with the landlord.

Solution :

Assessee : Mr. Kushal Sengupta Valuation Date : 31.3.2011 Assessment Year : 2011-12

Computation of Value of House Property

For Situations (a) & (b):

Computation of Gross Maintainable Rent (Amount in ₹)

Particulars	No Rental Deposit	Rental Deposit excess of 3 Mths
Actual Annual Rent	1,35,000	1,35,000
Add: Municipal Taxes borne by the tenant	6,000	6,000
1/9th of Actual Rent Receivable since repair expenses are	15,000	15,000

borne by the tenant (₹1,35,000/ 9)		
Rental Deposits - 15% Interest on ₹ 1,00,000	Nil	15,000
GROSS MAINTAINABLE RENT	**1,56,000**	**1,71,000**
Less: Municipal Taxes Paid	11,000	11,000
Less: 15% of Gross Maintainable Rent	23,400	25,650
Net Maintainable Rent	**1,90,400**	**2,07,650**
Case (a) Capitalization of Net Maintainable Rent		
-Freehold Land NMR x 12.5	**23,80,000**	**25,56,625**
Case (b) Capitalization of Net Maintainable Rent		
-Leasehold Land - Unexpired Lease 50 Years = NMR×10	**19,04,000**	**20,07,650**
Property Acquired after 31.3.1974 i.e. 10.5.1997	**15,00,000**	**15,00,000**
Therefore, Value of the Property (whether on Lease-hold Land or on Freehold Land)	**15,00,000**	**15,00,000**

For Situation (c) : In case of excess unbuilt area :

Unbuilt Area = (Actual Area of the Land **less** Built up Area) = (800 sq. mt **less** 136 sq. mt). = 664 sq. mt.

Excess Unbuilt Area = (Unbuilt Area **less** Specified Area) = 664 sq. mt. **less** 70% of 800 sq. mt. = 664 Less 560 = 104 sq. mt

% of Excess Unbuilt Area = **Excess Unbuilt Area** × **100/Aggregate Area** = 104 × 100/800 = 13%

Therefore, Value of the Property = Substituted Net Maintainable Rent i.e. ₹15,00,000 + 30% of SNMR = ₹ 19,50,000

Question No. 25 (b):

From the following dated furnished by Mr.Soumitra, determine the value of house property built on leasehold land as at the valuation date 31.3.2011 :

Particulars	₹
Annual Value as per Municipal valuation	1,40,000
Rent received from tenant (Property vacant for 3 months during the year)	1,08,000
Municipal tax paid by tenant	10,000
Repairs on property borne by tenant	8,000
Refundable deposit collected from tenant as security deposit which does not carry any interest	50,000

The difference between unbuilt area and specified area over aggregate area is 10.5%.

Solution :

Assessee: Mr. Soumitra Valuation Date: 31.3.2011 Assessment Year: 2011-12

Computation of Value of House Property

Step I: Computation of Gross Maintainable Rent(GMR)

Particulars	₹	₹
Actual Annual Rent- ₹ 1,08,000 x 12 Months/9 Months		1,44,000
Add: Municipal tax paid by the Tenant10,000		
1/9th of Actual Rent Receivable as repair expenses are borne by the tenant - ₹ 1,44,000/9	16,000	
Interest on Refundable Security Deposit- ₹ 50,000 x 15% x 9/12	6,000	32,000

GROSS MAINTAINABLE RENT (GMR)		**1,76,000**

Step II: Computation of Net Maintainable Rent (NMR)

Particulars	₹	₹
Gross Maintainable Rent (GMR)		1,76,000
Less: Municipal Taxes levied by the local authority	10,000	
15% of Gross Maintainable Rent - ₹1,76,000 x 15%	26,400	(36,400)
NET MAINTAINABLE RENT (NMR)		**1,39,600**

Step III: Capitalisation of the Net Maintainable Rent (CNMR) (Assumed that unexpired lease period is more than 50 Years)

NMR × Multiple Factor for an Unexpired Lease Period - ₹ 1,39,600 × 10 = ₹ 13,96,000

Step IV: Addition of Premium to SNMR in case of excess inbuilt area:

Particulars	₹
Add: Capitalisation of the Net Maintainable Asset	13,96,000
Premium for excess of 10.5% unbuilt area over specified area-30% of CNMR	4,18,800
Value of House Property as per Wealth Tax Act	**18,14,800**

Question No. 25(c):

Property Company Ltd. has let-out a premise with effect from 1.10.2010 on monthly rent of ₹ 1.5 lakh. The lease is valid for 10 years and the tenant has made a deposit equivalent to 3 months rent. The tenant has undertaken to pay the municipal taxes of the premises amounting to ₹ 2 lakh. What will be the value of the property under Schedule III of the Wealth Tax Act for assessment to wealth tax?

Solution :

Assessee: Property Company Ltd. Valuation Date: 31.3.2011 Assessment Year : 2011-12

Computation of Value of Let-out Property

Actual Annual Rent Receivable - ₹ 1,50,000 × 12 Months	18,00,000
Add: Municipal Taxes borne by the Tenant	2,00,000
GROSS MAINTAINABLE RENT	20,00,000
Less: Municipal Taxes levied by the Municipal Authority	2,00,000
Less: 15% of Gross Maintainable Rent (₹ 20,00,000 × 15%)	3,00,000
NET MAINTAINABLE RENT	15,00,000

Value of the Property = Capitalized Value of NMR

NMR × 8 (unexpired period of lease is less than 50 years) = ₹ 15,00,000×8 = ₹ **1,20,00,000**

Question No. 25 (d) Net wealth of firm consisting of three partners Bidyut, Kingshuk and Deepak in 2:2:1 and a capital contribution of ₹ 17 Lakhs, ₹ 13 Lakhs, and ₹ 12 Lakhs respectively is as under -

(a)	Value of assets located outside India	₹ 30,00,000
(b)	Value of assets located in India	₹ 80,00,000
(c)	Debts incurred in relation to assets in India	₹ 40,00,000

Determine the value of interest of the partners in the firm under the Wealth Tax Act, 1957.

Solution :

Assesses: Bidyut, Kingshuk & Deepak   Valuation Date: 31.3.2011
Assessment Year: 2011-12

Computation of net wealth of the Firm

Particulars	**₹**	**₹**
Value of Assets located in India	80,00,000	
Less: Liability in relation to assets in India	40,00,000	40,00,000
Value of Assets located outside India		30,00,000
Net Wealth of the Firm		**70,00,000**

Solution :

Computation of Interest of the Partner in the net wealth of the Firm (Amount in ₹)

Particulars	**Bidyut**	**Kingshuk**	**Deepak**
To the extent of Capital Contribution	17,00,000	13,00,000	12,00,000
Balance (Net Wealth-Capital Contribution) in Profit sharing ratio since dissolution ratio is not given	11,20,000	11,20,000	5,60,000
Interest of the Partner in the Net Wealth of the Firm	**28,20,000**	**24,20,000**	**17,60,000**

Computation of the Interest of the Partner in the net wealth of the Firm on the basis of location of assets: (Interest of the Partner in the Firm **apportioned** in the ratio of **4:3)**

Particulars	**Bidyut**	**Kingshuk**	**Deepak**
Assets Located Inside India	16,11,429	13,82,857	10,05,714
Assets Located Outside India	12,08,571	10,37,143	7,54,286
Interest of the Partner in the Net Wealth of the Firm	28,20,000	24,20,000	17,60,000

Question no. 25(e)

Satender is aged 35 years. His father settled a property in trust giving whole life interest therein to Satender. The income from the property for the years 2006-07 to 2009-10 was ₹ 70,000, ₹ 84,000, ₹ 90,000, ₹ 108,000, respectively. The expenses incurred each year were ₹ 2,000, ₹ 4,000, ₹ 5,000 and ₹6,000 respectively. Calculate the value of life interest of Mr. Jogi in the property so settled on the valuation date 31.3.2011, with the help of the factor of 9.267.

Step	**Procedure**
1	Average Income for last three years = (₹ 84,000 + ₹ 90,000 + ₹ 1,08,000)/ 3 = ₹ 94,000.
2	Average Expenses for the last three years = (₹ 4,000 + ₹ 5,000 + ₹ 6,000) / 3 = ₹ 5,000.
3	Maximum Permissible Expenses = Average Expenses **or** 5% of Average Income, whichever is less = 5% of ₹ 70,000 = ₹ 3,500
4	Average Annual Income = ₹ 94,000 Less ₹ 3,500 = ₹ 90,500.
5	Life Interest=Average Annual Income× Life Interest Factor = ₹ 90,500 × 9.267 = ₹ 8,38,664.

Question No.25 (f): 'X' received a vacant site under his father's will. The value of the site on 31.3.2011 is ₹15 Lakhs. As per terms of the 'Will' in the event 'X' wants to sell the site he should offer it to his brother for sale at ₹10 Lakhs. 'X', therefore, claims that the value of the site should be taken at ₹10 Lakhs as at 31.3.2011. Is the claim correct?

Solution :

1. As per Rule 21 of Schedule III to the Act, the **price or other consideration for which** any property may be **acquired by or transferred to any person under the terms of a deed of trust** or through or under any

restrictive agreement in any instrument of transfer **shall be ignored** for the purpose of determining the value under the provisions of the Schedule.

2. In view of the above, the value of the site should be taken as ₹ 15 Lakhs and not as ₹ 10 Lakhs.

3. Therefore, **claim of X is incorrect.**

Question No.26 (a):

HIG Ltd is a public limited company. As a good corporate citizen and as a measure of gaining goodwill of the people living in and around its industry, which is to some extent a polluting industry, it provided funds for establishing drinking water facilities to the residents in the vicinity of the refinery and also provided aid to the school run for the benefit of the children of those local residents. The Assessing Officer declined to allow that expenditure on the ground that it was not an item of expenditure incurred by the assessee for earning the income. The company, however, contended that such expenditure can be claimed as deduction. Is the claim of HIG Ltd. tenable in law? Discuss.

Answer:

The Madras High Court has recognized the relevance of social costs to business in deciding the case of CIT v. Madras Refineries Ltd. (2004) 138 Taxman 261. The High Court observed that the concept of business is not static. It has evolved over a period of time to include within its fold the concrete expression of care and concern for the society at large and the people of the locality in which the business is located in particular.

Further, to be known as a good corporate citizen brings goodwill of the local community, as also with the regulatory agencies and the society at large, thereby creating an atmosphere in which the business can succeed in a greater measure with the aid of such goodwill. In this case, the High Court observed that monies spent for bringing drinking water as also for establishing or improving the school meant for the residents of the locality in which the business is situated cannot be regarded as being wholly outside the ambit of the business concerns of the assessee, especially, where the undertaking owned by the assessee is one which is to some extent a polluting industry. The High Court, therefore, upheld the order of the Tribunal allowing deduction for the amount spent on bringing drinking water to the locality and in aiding a local school.

Thus, in view of the above case, the claim of HIG Ltd. is tenable in law.

Question No.26 (b):

(i) What are the conditions to be fulfilled by a public facility to be eligible to be notified as an infrastructure facility in accordance with the provisions of section 36(1)(viii)?

(ii) List 10 public facilities which have been notified by the CBDT as infrastructure facility for the purposes of section 36(1)(viii).

Answer:

(i) The CBDT has, vide Notification No.187/2006 dated 20.7.2006, spelt out the conditions to be fulfilled by a public facility to be eligible to be notified as an infrastructure facility in accordance with the provisions of clause (d) of the Explanation to section 36(1)(viii). The conditions specified are that -

(a) it should be owned by a company registered in India or by a consortium of such companies or by an authority or a board or a corporation or any other body established or constituted under any Central or State Act;
(b) it has entered into an agreement with the Central Government or a State Government or a local authority or any other statutory body for (i) developing or (ii) operating and maintaining or (iii) developing, operating and maintaining a new infrastructure facility similar in nature to an infrastructure facility referred to in the Explanation to section 80-IA(4)(i);
(c) it has started or starts operating and maintaining such infrastructure facility on or after 1st April, 1995.

(ii) The CBDT has, vide Notification No.188/2006 dated 20.7.2006, notified the following public facilities as infrastructure facility for purposes of section 36(1)(viii)-
(1) Inland Container Depot and Container Freight Station notified under the Customs Act, 1962
(2) Mass Rapid Transit system
(3) Light Rail Transit system
(4) Expressways
(5) Intra-urban or semi-urban roads like ring roads or urban by-passes or flyovers
(6) Bus and truck terminals
(7) Subways
(8) Road dividers
(9) Bulk Handling Terminals which are developed or maintained or operated for development of rail system
(10) Multilevel Computerised Car Parking.

Question No.26 (c):

Does redemption of preference shares amount to a 'transfer' within the meaning of section 2(47) of the Income-tax Act in the hands of the shareholder? What will be the nature of excess realisation by a shareholder over the cost of acquisition of such shares for purpose of income-tax? Discuss.

Answer: When a preference share is redeemed by a company, what the shareholder does in effect is to sell the share to the company. The company redeems its preference shares only by paying the preference shareholders the value of the shares and taking back the preference shares. The definition of the term "transfer" under section 2(47) is not an exhaustive definition but an inclusive one. "Transfer" in relation to capital asset includes, inter alia, sale, exchange or relinquishment of a capital asset. When preference shares are redeemed by a company, the shareholder has to surrender the shares in order to get the money in lieu thereof. Therefore, there is also a relinquishment which brings the transaction within the meaning of section 2(47). The consideration received by the shareholder from the company is certainly for sale/relinquishment of the shares and therefore, the redemption of preference shares amounts to "transfer" and the gain arising therefrom, being the excess realisation over the cost of acquisition, shall be charged to tax under the head "Capital Gains". This was upheld by the Supreme Court in Anarkali Sarabhai vs CIT (1997) 224 ITR 422.

Question No.26 (d):

Discuss any three provisions which have been incorporated in the tax laws to counteract ethical failures on the part of the taxpayer.

Answer:

There are some instances where the tax payer has compromised on compliance with the ethical standards and this has prompted the Government to plug the loopholes which have led to erosion of tax revenue. The Government has attempted to do so by incorporation of clubbing provisions, transfer pricing provisions, introduction of new taxes, provision of mechanism for enforcing furnishing of annual information return, increasing the scope and enforcing compliance of tax deduction provisions etc. Some of the provisions which have been incorporated in the tax laws to counteract ethical failures on the part of the tax payer are briefed hereunder -

(i) Incorporation of clubbing provisions

Clubbing provisions have been enacted to counteract the tendency on the part of the tax-payers to dispose of their property or transfer their income in such a way that their tax liability can be avoided or reduced. For example, in the case of individuals, income-tax is levied on a slab system on the total income. The tax system is progressive i.e. as the income increases, the applicable rate of tax increases. Some taxpayers in the higher income bracket have a tendency to divert some portion of their income to their spouse, minor child etc. to minimize their tax burden. In order to prevent such tax avoidance, clubbing provisions have been incorporated in the Act, under which income arising to certain persons (like spouse,minor child etc.) have to be included in the income of the person who has diverted his income for the purpose of computing tax liability.

(ii) Incorporation of transfer pricing provisions

Transfer pricing provisions were brought in by the Finance Act, 2001 with a view to provide a statutory framework which can lead to computation of reasonable, fair and equitable profits and tax in India, in the case of multinational enterprises carrying on business in India, whose profits can be controlled by the multinational group, by manipulating the prices charged and paid in intra-group transactions, which may lead to erosion of tax revenue. Thus, non-compliance of ethical tax practices by some multinational companies led to introduction of transfer pricing provisions.

(iii) Enforcing compliance of TDS provisions

This has been enforced by denying deduction of expenditure to an assessee in case of failure to deduct tax at source or remit such tax deducted within the prescribed time. However, such expenditure would be allowed as deduction in the year in which such tax is deducted and paid. This provision is to prevent loss of tax revenue on account of failure of the assessee to deduct/remit tax. The introduction of this provision is one step to encourage ethical tax practices by assessees.

Question No.26 (e):

Briefly explain the difference in treatment of the following items under the Income-tax Act
and Accounting Standards –

(a) Valuation of inventories; and

(b) Depreciation.

Answer:

(a) Valuation of Inventories

Section 145A requires assessees to follow only the Inclusive method, whereas AS-2 on "Valuation of Inventories" requires adoption of Exclusive method. There are two methods for accounting of tax, duty, cess etc. while preparing accounts. They are the Inclusive method and the Exclusive method. Under the Inclusive method, the amounts are grossed up whereas under the Exclusive method, the figures are shown net of CENVAT credit.

(b) Depreciation

The basis for provision of depreciation as per AS-6 is the estimated useful life of an asset. However, under the Income-tax Act, the useful life of an asset is not relevant. The concept of "block of assets" is applicable and the rates of depreciation are higher under the Income-tax Act with the objective of providing incentive to the assessee. Further, incentive is also provided by way of additional depreciation in respect of new plant and machinery installed by assessees engaged in the manufacture or production of any article or thing.

The Accounting Standard provides for allowance of depreciation on revalued amount in the case of revaluation. Under Income-tax Act, depreciation is allowed only on the written down value of block of assets. Revaluation is not recognized for income-tax purposes.

Question No.27 (a):

List the eligibility criteria, as laid down in Rule 18C, for Industrial Parks to claim benefit under section 80-IA(4)(iii).

Answer:

The CBDT has, vide Notification No.2/2008 dated 8.1.2008, substituted the existing Rule 18C with new Rule 18C, which lays down the following eligibility criteria for Industrial Parks to claim benefit under section 80-IA (4)(iii) -

(1) The undertaking should begin to develop, develop and operate or maintain and operate an industrial park any time during the period from 1.4.2006 to 31.3.2009.

(2) The undertaking and the Industrial Park should be notified by the Central Government under the Industrial Park Scheme, 2008.

(3) The undertaking should continue to fulfill the conditions envisaged in the Industrial Park Scheme, 2008.

Question No.27 (b):

The Finance Act, 2007 has inserted a new section 80-ID in the Income-tax Act, 1961 to provide for a 100% deduction of the profits and gains derived by an undertaking, inter alia, from the business of building, owning and operating a convention centre in a specified area. Convention Center is defined as a building of a prescribed area and having such other facilities and amenities as may be prescribed. Enlist such prescribed conditions to be fulfilled by a convention centre to avail the benefit of deduction under this section.

Answer:

Under section 80-ID, a 'convention centre' is defined as a building of prescribed area and having such other facilities and amenities as may be prescribed.

Rule 18DE prescribes the following conditions to be fulfilled in order to avail deduction under section 80-ID:

(a) the convention centre shall have a minimum covered plinth area of 25,000 sq. mts;
(b) it shall have minimum of 3,000 seating capacity;
(c) there shall be minimum of 10 convention halls;
(d) the convention centre shall have convention halls, whether called conference halls or seminar halls or auditorium, for holding seminars and conferences;
(e) each convention hall of the convention centre shall be equipped with modern public address system, slide and power-point projection system and LCD projector or video screening facility;
(f) the convention centre shall have a documentation centre with computers and printers, telephone with STD or ISD facilities, e-mail, photocopy and scanning facility along with trained operators to provide these facilities;
(g) the convention centre shall be completely centrally air-conditioned;
(h) the convention centre shall have adequate parking facility and other public convenience as per local building regulations and should also fulfill all local building regulations in respect of fire and safety.

In addition to the above facilities, the convention centers may have the following:
(a) an amphitheatre and landscaped open spaces for outdoor conference or seminar related activities;
(b) a kitchen, dining facility, cafeteria or restaurant only to support events in the convention centre.

Question No.27 (c):

What is the time limit for completion of assessment/re-assessment where a reference is made to the Transfer Pricing Officer under section 92CA(1) in the following cases –
(i) for completion of assessment under section 143 for the A.Y.2008-09.
(ii) for completion of assessment/re-assessment/re-computation under section 147, if notice is served under section 148 on 1.7.2007.
(iii) for completion of assessment in cases where the last of the authorizations for search under section 132 was executed during the financial year 2007-08.

Answer:

(i) 33 months from the end of the assessment year in which the income was first assessable i.e. by 31.12.2011.
(ii) 21 months from the end of the financial year in which notice under section 148 is served i.e. by 31.12.2009.
(iii) 33 months from the end of the financial year in which the last of the authorizations for search under section 132 was executed i.e. by 31.12.2010.

Question No.27 (d):

The Assessing Officer issued directions for special audit under section 142(2A) to Mr. A. Mr. A contended that such directions were issued without giving him an opportunity of being heard. The Assessing Officer maintained that it was not necessary to give Mr. A an opportunity of being heard. Discuss, with reasons, whether the contention of the
Assessing Officer is correct or that of Mr. A.

Answer:

The Supreme Court in Rajesh Kumar & Ors. v. DCIT (2006) 287 ITR 91 observed that the order under section 142(2A) is a quasi judicial order. Therefore, the principles of natural justice have to be applied and the assessee has to be given an opportunity of being heard before directing the special audit. The principles of natural justice are based on two principles, namely, (i) nobody shall be condemned unheard; (ii) nobody shall be a judge of his own cause. Once it is held that the assessee suffers civil consequences and any order passed would be prejudicial to him, the principles of natural justice must be held to be implicit. If the principles of natural justice were to be excluded, the Parliament could have said so expressly.

Accordingly, to give effect to the observation of the Supreme Court, the Finance Act, 2007 has provided that the Assessing Officer is now required to give the assessee a reasonable opportunity of being heard before issuing directions for special audit under section 142(2A).

Therefore, the contention of Mr.A is correct

Question No.28 (a):

"The presumptions provided in section 132(4A) can be made only with regard to the proceedings for search and seizure under section 132". Discuss the correctness or otherwise of this statement.

Answer:

This statement is not correct.

Section 292C has been inserted by the Finance Act, 2007 retrospectively with effect from 1.10.1975 so that the presumptions contained in section 132(4A) can be made in any proceedings under the Act. This section provides that where any books of account, other documents, money, bullion, jewellery or other valuable article or thing are or is found in the possession or control of any person in the course of a search under section 132, it may, in any proceeding under this Act, be presumed that -

(1) such books of account, other documents, money, bullion, jewellery or other valuable article or thing belong or belongs to such person;

(2) the contents of such books of account and other documents are true;

(3) the signature and every other part of such books of account and other documents which purport to be in the handwriting of any particular person or which may reasonably be assumed to have been signed by, or to be in the handwriting of, any particular person, are in that person's handwriting; and

(4) In the case of a document stamped, executed or attested, that it was duly stamped and executed or attested by the person by whom it purports to have been so executed or attested

Question No.28 (b):

Dreamjet is an airline incorporated in Paris. Its aircrafts land at the Indira Gandhi International Airport in India. The airline pays landing and parking charges to the Airport Authorities. Can such payments be subject to deduction of tax at source under section 194-I?

Answer:

The Delhi High Court has, in United Airlines vs. CIT (2006) 287 ITR 281, held that the landing and parking fee for aircraft charged by the Airport Authorities is considered as rent for the purpose of section 194-I. As per Explanation (i) to section 194-I, rent means any payment, by whatever name called, under any lease, sub-lease, tenancy or any other agreement or arrangement for the use of, inter alia, land. When the wheels of an aircraft coming into an airport touches the surface of the air-field, the use of the land of the airport immediately begins. Similarly, for parking the aircraft in that airport, there is use of the land. Thus, even the landing of aircraft or parking of the aircraft amounts to use of the land of the airport. Hence, the landing fee and parking fee will amount to rent for the purpose of section 194-I.

Question No.28 (c):

Explain whether the TDS provisions under section 194C are attracted in respect of a contract for fabrication of an article or thing as per the specifications given by the assessee.

Answer:

The CBDT has, vide Circular No.13/2006 dated 13.12.2006, clarified the issue regarding the applicability of TDS provisions of section 194C on a contract for fabrication of article or thing as per the specifications given by the assessee. The CBDT observed that before taking a decision on the applicability of TDS under section 194C on a contract, it would have to be examined whether the contract in question is a contract for work or a contract for sale.

The CBDT clarified that the provisions of section 194C would apply in respect of a contract for supply of any article or thing as per prescribed specifications only if it is a contract for work and not a contract for sale. Where the property in the article or thing so fabricated passes from the fabricator-contractor to the assessee only after such article or thing is delivered to the assessee, such contract would be a contract of sale and would, therefore, fall outside the purview of section 194C.

Question No.28 (d):

Discuss whether the provisions of tax deduction at source are applicable to payments made by the customers on account of cooling charges to the cold storage owners.

Answer:

Circular No.1/2008 dated 10.1.2008 provides clarification regarding applicability of provisions of section 194-I to payments made by the customers on account of cooling charges to the cold storage owners.

The main function of the cold storage is to preserve perishable goods by means of a mechanical process, and storage of such goods is only incidental in nature. The customer is also not given any right to use any demarcated space/place or the machinery of the cold store and thus does not become a tenant. Therefore, the provisions of 194-I are not applicable to the cooling charges paid by the customers of the cold storage.

However, since the arrangement between the customers and cold storage owners are basically contractual in nature, the provisions of section 194-C would be applicable to the amounts paid as cooling charges by the customers of the cold storage.

Question No.29 (a):

"The power of the Settlement Commission to grant immunity from prosecution has now been restricted". Is this statement correct? Elucidate.

Answer:

This statement is correct. Under section 245H, the Settlement Commission may grant immunity from prosecution for any offence under the Indian Penal Code, Income-tax Act and any other Central Act. This power has now been restricted in respect of application made under section 245C on or after 1.6.2007. In respect of such cases, the Settlement Commission shall not grant immunity from prosecution for any offence under the Indian Penal Code or under any Central Act other than the Income-tax Act and Wealth-tax Act.
However, in respect of applications pending as on 1.6.2007, the Settlement Commission has the power to grant immunity from prosecution for any offence under the Indian Penal Code and other Central Acts also.

Question No.29 (b): Discuss the correctness or otherwise of the following propositions in the context of the
Income-tax Act, 1961:
(i) A fresh claim before the Assessing Officer can be made only by filing a revised return and not otherwise.
(ii) The powers of the Commissioner of Income-tax (Appeals) to enhance the assessment are plenary and quite wide.
(iii) At the time of hearing of rectification application, the Income-tax Appellate Tribunal can re-appreciate the evidence produced during the proceedings of the appeal hearing.
(iv) The High Court cannot interfere with the factual finding recorded by the lower authorities and the tribunal, without any valid reasons.

Answer:

(i) This proposition is correct. A return of income filed within the due date may be revised by filing a revised return under section 139(5) where the assessee finds any omission or wrong statement in the original return subject to satisfying other conditions. There is no provision in the Income-tax Act to make changes or modification in the return of income by filing a letter. In a case where a return of income has been filed within the due date, the only option available to the assessee to make an amendment to such return is by way of filing a revised return under section 139(5). Therefore, a fresh claim can be made before the Assessing Officer only by filing a revised return and not otherwise. The Supreme Court in Goetze (India) Ltd. vs. CIT (2006) 284 ITR 323 has held that there was no provision in the Income Tax Act to allow an amendment in the return of income filed except by way of filing a revised return.

(ii) The proposition is correct in law. The Supreme Court has, in CIT vs. McMilan & Co. (1958) 33 ITR 182 and CIT vs. Kanpur Industrial Syndicate (1964) 53 ITR 225, held that in disposing of an appeal before him, the appellate authority can travel over a whole range of the assessment order. The scope of his powers is co-terminus with that of the Assessing Officer. He can do what the Assessing Officer can do and can also direct him to do what he has failed to do. He can assess income from sources which have been considered by the Assessing Officer but not brought to tax. He can consider every aspect of the assessment order and give appropriate reliefs. The

Allahabad High Court has, in CIT v. Kashi Nath Chandiwala (2006) 280 ITR 318, held that the appellate authority is empowered to consider and decide any matter arising out of the proceedings in which the order appealed against was passed notwithstanding the fact that such matter was not raised before him by the assessee. The Commissioner (Appeals) is entitled to direct additions in respect of items of income not considered by the Assessing Officer.

Further, the Apex Court has, in the case of Jute Corporation of India Ltd. vs. CIT (1991) 187 ITR 688, held that the appellate authority is vested with all the plenary powers which the subordinate authority may have in the matter. He also has the jurisdiction to permit the appellant to raise an additional ground, if the ground became available subsequently because of change in law or because of change in circumstances and such ground could not have been raised at the time of filing the return or at the time of making an assessment. He must be satisfied that the ground raised is bona fide and that the same could not have been raised earlier for good reasons.
Thus, the powers of the appellate authority in enhancing the assessment are very wide and plenary.

(iii) The proposition is not correct as per law. This is because section 254(2) specifically empowers the Appellate Tribunal to amend any order passed by it, either suo-moto or on an application made by the assessee or Assessing Officer, with a view to rectifying any mistake apparent from record, at any time within 4 years from the date of the order sought to be amended.

The powers of the tribunal under section 254(2) relating to rectification of its order are very limited. Such powers are confined to rectifying any mistake apparent from the record. The mistake has to be such that for which no elaborate reasons or inquiry is necessary. Accordingly, the re-appreciation of evidence placed before the Tribunal during the course of the appeal hearing is not permitted. It cannot readjudicate the issue afresh under the garb of rectification. This issue came up for consideration before the Punjab & Haryana High Court in the case of CIT vs.Vardhman Spinning (1997) 226 ITR 296. The Court observed that the jurisdiction to review or modify orders passed by the authorities under the Act cannot be inferred on the basis of a supposed inherent right.

(iv) The proposition is correct in law. A finding of fact cannot be disturbed by the High Court in exercise of its powers under section 260A. The Income-tax Appellate Tribunal is a fact finding authority and the findings of fact recorded by the Tribunal can be interfered with by the High Court under section 260A only on the ground that the same were without evidence or material, or if the finding is contrary to the evidence, or is perverse or there is no direct nexus between conclusion of fact and the primary fact upon which that conclusion is based.

In CIT vs. P. Mohanakala (2007) 291 ITR 278 and Commissioner of Agricultural income tax vs. M.N.Moni (2007) 291 ITR 387, the Apex Court observed that the High Court had set aside the factual findings of the lower authorities and the Tribunal without any valid reason. The Apex Court held that the findings of fact could not be interfered with by the High Court without carefully considering the facts on record, the surrounding circumstances and the material evidence. There is no scope for interference with the factual findings, unless the findings are per se without reason or basis, perverse and/or contrary to the material on record.

Question No.29 (c):

(i) The Commissioner of Income-tax issued notice to revise the order passed by an Assessing Officer under section 143. During the pendency of proceedings before the Commissioner, on the basis of material gathered during survey under section 133A, the Commissioner of Income-tax issued a second notice, the contents of which were different
from the contents of the first notice. State with reasoning whether the action of the Commissioner is justified as to the second notice.

(ii) State the circumstances where the appellant shall be entitled to produce additional evidence, oral or documentary, before the Commissioner of Income-tax (Appeals) other than the evidence produced during the proceedings before the Assessing Officer.

(iii) In the context of transfer pricing provisions, read with rules, what are the factors to be considered while selecting the most appropriate method?

Answer:

(i) The action of the Commissioner in issuing the second notice is not justified. The term "record" has been defined in clause (b) of Explanation to section 263(1). According to this definition "record" shall include and shall be deemed always to have included all records relating to any proceeding under the Act available at the time of examination by the Commissioner. In other words, the information, material, report etc. which were not in existence at the time the assessment was made and came into existence afterwards can be taken into consideration by the Commissioner for the purpose of invoking his jurisdiction under section 263(1). However, at the same time, in view of the express provisions contained in clause (b) of the Explanation to section 263(1), such information, material, report etc. can be relied upon by the Commissioner only if the same forms part of record when the action under section 263 is taken by the Commissioner, Issuance of a notice under section 263 succeeds the examination of record by Commissioner. In the present case, the Commissioner initially issued a notice under section 263, after the examination of the record available before him. The subsequent second notice was on the basis of material collected under section 133A, which was totally unrelated and irrelevant to the issues sought to be revised in the first notice. Accordingly, the material on the basis of which the second notice was issued could not be said to be "record" available at the time of examination as emphasised in Explanation (b) to section 263(1).

(ii) As per Rule 46A(1) of the Income-tax Rules 1962, an appellant shall be entitled to produce before the Commissioner (Appeals), evidence, either oral or documentary, other than the evidence produced by him during the course of proceedings before the Assessing Officer, only in the following circumstances -

(a) where the Assessing Officer has refused to admit evidence which ought to have been admitted; or

(b) where the appellant was prevented by sufficient cause from producing the evidence which he was called upon to produce by the Assessing Officer; or

(c) where the appellant was prevented by sufficient cause from producing before the Assessing Officer any evidence which is relevant to any ground of appeal; or

(d) where the Assessing Officer has made the order appealed against without giving sufficient opportunity to the appellant to adduce evidence relevant to any ground of appeal.

(iii) Rule 10C deals with the determination of the most appropriate method. Under this Rule, the method which is best suited to the facts and circumstances of each particular international transaction, and which provides the most reliable measure of an arm's length price in relation to the international transaction will be considered as the most appropriate method.
For the purpose of selecting the most appropriate method, the following factors should be taken into account -
(a) the nature and class of the international transaction;
(b) the class or classes of associated enterprises entering into the transaction and the functions performed by them taking into account assets employed or to be employed and risks assumed by such enterprises;
(c) the availability, coverage and reliability of data necessary for application of the method;
(d) the degree of comparability existing between the international transaction and the uncontrolled transaction and between the enterprises entering into such transactions;
(e) the extent to which reliable and accurate adjustments can be made to account for differences, if any, between the international transaction and the comparable uncontrolled transaction or between the enterprises entering into such transactions;
(f) the nature, extent and reliability of assumptions required to be made in application of a method.

Question No.30 (a):
Explain as to what the term 'Advance Ruling' means under the Income-tax Act 1961.

Answer:
The term 'advance ruling' has been defined in section 245N(a) to mean :-
(a) a determination by the Authority in relation to a transaction which has been undertaken or is proposed to be undertaken by a non-resident applicant; or
(b) a determination by the Authority in relation to the tax liability of a non-resident arising out of a transaction which has been undertaken or is proposed to be undertaken by a resident applicant with such non-resident, and such determination shall include the determination of any question of law or of fact specified in the application;
(c) a determination or decision by the Authority in respect of an issue relating to computation of total income which is pending before any income-tax authority or the Appellate Tribunal and such determination or decision shall include the determination or decision on any question of law or of fact relating to such computation of total income specified in the application.

Question No.30 (b):

State the circumstances under which a certificate can be issued by the Assessing Officer to the Tax Recovery Officer.

Answer:
The assessee is required to pay the tax due as per the notice of demand issued under section 156 within 30 days of the service of notice. If the amount is not paid within 30 days, then it could be recovered as per the provisions of sections 222 to 227, 229 and 232 of the Income-tax Act. Where the assessee has not paid the tax due within the specified period, the Assessing Officer may issue a certificate to the Tax Recovery Officer for initiating recovery proceedings in the following circumstance –

(a) where the assessee has not filed an appeal before Commissioner (Appeals) or Appellate Tribunal; and

(b) has also not made any request for extension of time for payment of tax.

As per the provisions of section 222, when an assessee is in default or is deemed to be in default in making a payment of tax, the Tax Recovery Officer may draw up under his signature a statement in the prescribed form specifying the amount of arrears due from the assessee. Such statement is referred to as "certificate". He shall proceed to recover from such assessee the amount specified in the certificate by one or more of the modes mentioned below, in accordance with the rules laid down in the Second Schedule -

(a) attachment and sale of the assessee's movable property;

(b) attachment and sale of the assessee's immovable property;

(c) arrest of the assessee and his detention in person;

(d) appointing a receiver for the management of assessee's movable and immovable properties.

The Tax Recovery Officer may have recourse to any of the above measures notwithstanding that proceedings for recovery of the arrears by any other mode have already been taken.