

QN. 1 (a) State, with reasons in brief, whether the following statements are correct or incorrect:

- (i) Interest on debentures is payable only when there is profit.
- (ii) An underwriter while entering into a contract for issue of shares should be a company.
- (iii) Partly paid-up preference shares can be redeemed.
- (iv) Dividend can be paid on calls-in-advance.
- (v) Interest cannot be paid out of capital during construction period. (2 marks each)

(b) Choose the most appropriate answer from the given options in respect of the following :

- (i) As per the provisions laid down in Table-A of Schedule-I of the Companies Act, 1956, the amount of call as the percentage of the face value of shares should not exceed —
 - (a) 10%
 - (b) 25%
 - (c) 20%
 - (d) None of the above.
- (ii) The minimum percentage of the face value of shares that should be called for as application money is —
 - (a) 5
 - (b) 10
 - (c) 15
 - (d) 20.
- (iii) Debentures issued as collateral security will be debited to —
 - (a) Bank account
 - (b) Debentures suspense account
 - (c) Debentures account
 - (d) Collateral security account.
- (iv) Preliminary expenses are —
 - (a) Current liability
 - (b) Current assets ,
 - (c) Fictitious assets
 - (d) Contingent liability.
- (v) As per section 77A of the Companies Act, 1956, every buy-back should be completed within a period of —
 - (a) 3 months from the date of passing special resolution
 - (b) 12 months from the date of passing special resolution
 - (c) 6 months from the date of passing special resolution
 - (d) 1 month from the date of passing special resolution. (1 mark each)

(c) Re-write the following sentences after filling-in the blank spaces with appropriate word(s)/figure(s) :

- (i) Issue of debentures to vendors is known as issue of debentures _____.
- (ii) Profit prior to incorporation should be credited to _____ account.
- (iii) If forfeited shares are re-issued at a discount, the amount of discount should in no case exceed the amount credited to _____.
- (iv) Accounting standards are formulated under the authority of the _____.
- (v) Yield basis valuation of shares may take the form of valuation based on rate of return and _____. (1 mark each)

Ans. 1 (a) (i) Incorrect, Interest on debentures is a liabilities of a Company and has to be paid even if a Company incurs losses.

(ii) Incorrect, an underwriter is a person who agrees to take a specified number of shares or debentures, or a specified amount of debenture stock in the event of public not subscribing for them in consideration for a commission and it can be any person a institutions need not necessarily be a Company.

(iii) Incorrect, as per section of Companies Act; only fully paid preference shares can be redeemed. If partly paid shares are to be redeemed, call must be made first; and then redemption must be carried out.

(iv) Incorrect, Dividend is to be paid only on called up value of shares and not on calls paid up in advance.

(v) Correct, Interest paid out of capital during construction period needs to be capitalized to the respective asset during the construction period.

Ans. 1 (b) (i) (d) None of the above

(ii) (a) 5%

(iii) (c) Debentures Account

(iv) (c) Fictitious Assets.

(v) (b) 12 months from the date of passing Special Resolution.

- Ans. 1 (c)**
- (i) Other than Cash
 - (ii) Capital Reserve A/c
 - (iii) Share forfeited A/c
 - (iv) Accounting Standard Board
 - (v) Rate of Dividend.

QN .2. (a) What is amortisation period of intangible assets ? Can useful life of the intangible assets exceed the period of legal rights ? **(6 marks)**

(b) Suraj Ltd. issued to public 1,50,000 equity shares of Rs.100 each at par. Rs.60 per share? were payable along with the application and the balance on allotment, This issue was underwritten equally by A, B. and C for a commission of 3%. Applications for 1,40,000 shares were received as per details given below :

Underwriter	Firm Underwriting Applications	Marked Applications	Total Applications
A	5,000	40,000	45,000
B	5,000	46,000	51,000
C	3,000	34,000	37,000
Unmarked Applications	--	--	7,000
			<u>1,40,000</u>

It was agreed to credit the unmarked applications to A and C. Suraj Ltd. accordingly made the allotment and received the amounts due from the public. The underwriters settled their accounts.

You are required to — (i) prepare a statement of liability of the underwriters 1 assuming that the benefit of firm underwriting is given to individual underwriters; ! and (ii) journalise the above transactions (including cash) in the books of Suraj Ltd. **(6 marks)**

(c) Give the necessary journal entries both at the time of issue and redemption of debentures in the following case :

Eagle Ltd. issued Rs.1,00,000, 15% debentures of Rs.100 each at a discount of 5%, but redeemable at a premium of 5% at the end of 4 years. **(3 marks)**

Ans. 2 (a) Amortization period of intangible assets depends upon its useful life; it can be upto a maximum period of 10 years unless it is clearly evident useful life is long than covers. If economic benefits from intangible assets are achieved through legal rights granted for finite period the useful life of intangible should not exceed legal rights period unless the legal rights is renewable and renewal is almost certain.

Ans. 2 (b) Statement showing liability of each underwriters

Particulars	Under writers		
	A	B	C
Gross liabilities	50,000	50,000	50,000
(-) Firm underwriting	<u>5,000</u>	<u>5,000</u>	<u>3,000</u>
	45,000	45,000	47,000
(-) Marked application	<u>40,000</u>	<u>46,000</u>	<u>34,000</u>
	5,000	(1000)	13,000
Excess of 1000 share of B's will be credited to A & C in their Gross liability ratio.	(500)	+ 1000	(500)
	<u>4,500</u>	<u>NIL</u>	<u>12,500</u>
Less : Unmarked Application distributed to A & C in their Gross liability ratio	(3500)	--	(3500)
	<u>1000</u>	<u>NIL</u>	<u>9000</u>
Add : firm underwriting	5000	5000	3000
	<u>6000</u>	<u>5000</u>	<u>12000</u>
Net liability			

(ii) Journal Entries in the Books of Suraj Ltd.

Bank A/c	--- Dr.	8400000	
To Share Application A/c			8400000
(Being application money received on 140000 shares at Rs.60 per share from public)			
Share Application a/c	- Dr.	8400000	
To Share Capital A/c			8400000
(Being money received on share application on 140000 shares transferred to share capital A/c)			
A's A/c	-- Dr. (6000 x 60)	360000	
B's A/c	-- Dr. (5000 x 60)	300000	
C's A/c	-- Dr. (12000 x 60)	720000	
To Share Capital A/c			1380000
(Being application money due from underwriters Including firm underwriting)			
Underwriting Commission A/c – Dr.		450000	
To A's A/c			150000
To B's A/c			150000
To C's A/c			150000
(Being underwriting commission due to underwriters)			
Bank A/c	-- Dr.	930000	
To A's A/c			210000
To B's A/c			150000
To C's A/c			570000
(Being amount received from underwriters on account of share application less underwriting commission due to them)			

Ans. 2 (c)

Bank A/c	--- Dr.	9500000	
Loss on issue of debentures A/c -- Dr.		1000000	
To 15% debentures A/c			10000000
To Premium on redemption of debentures A/c			500000
At the time of Issue			
Bank A/c	-- Dr.	9500000	
Discount on issue of debentures A/c – Dr.		500000	
To 15% debentures A/c			10000000
(Being 15% debentures issued at a Discount of 5%)			
At the time of Redemption			
15% debentures A/c	-- Dr.	1000000	
Premium on Redemption of debentures A/c		500000	
To Bank A/c			10500000
(Being 15% debentures redeemed at a premium of 5%)			

QN. 3. (a) On the basis of following information, compute the value of an equity share and a preference share of both Chelsi Ltd. and Nensi Ltd. — (i) when only a few shares are sold; and (ii) when controlling shares are to be sold :

	Chelsi Ltd. (Rs.)	Nensi Ltd. (Rs.)
Profit after tax	10,00,000	10,00,000
12% Preference share capital (shares of Rs.100 each)	10,00,000	20,00,000
Equity share capital (shares of Rs.10 each)	50,00,000	40,00,000

Assume that market expectation for both companies is 15%; and 80% of the profits are distributed. (6 marks)

(b) What do you understand by 'provision for taxation' ? What factors are to be considered while estimating the provision for taxation ? (6 marks)

(c) Ronny Ltd. forfeited 200 shares of Rs.10 each, Rs.8 per share being called-up on which a shareholder paid application and allotment money of Rs.5 per share but did not pay the first call money of Rs.3 per share. Of these forfeited shares, 150 shares were subsequently re-issued by the company as fully paid-up for Rs.8 per share. Give journal entries for the forfeiture and re-issue of shares.

Ans. 3 (a) Assumption : - In the given question no separate market explanation is given for equity & preference shares so it is presumed that a slightly minor dividend rate (15% - 2%) = 13% may be applied for valuation of preference shares.

Preference dividend coverage Ratios : -

$$\begin{aligned}
 \text{Chelsi Ltd.} &= \frac{\text{Profit after tax}}{\text{Preference dividend}} \times 100 \\
 &= \frac{1000000}{120000} \times 100 = 8.33 \% \\
 \text{Nensi Ltd.} &= \frac{1000000}{240000} \times 100 = 4.16\%
 \end{aligned}$$

The market explanation rate may be adjusted for the factors like ability to pay preference dividend. In this question chelsi ltd. better preferences dividend coverage ratio as compared to Nensi Ltd. coverage ratio.

∴ Market expectations rate for Nensi Ltd should be mere by 0.5%

∴ Market expectation rate for Nensi Ltd should be 13.5%

Valuation of Preference Share : -

$$\begin{aligned}
 &12\% \\
 \text{Chelsi Ltd} &=> \frac{12\%}{13\%} \times 100 = \text{Rs. } 92.31/-
 \end{aligned}$$

$$\begin{aligned}
 &12\% \\
 \text{Nensi Ltd.} &=> \frac{12\%}{13.5\%} \times 100 = \text{Rs. } 88.88/-
 \end{aligned}$$

Calculation of Equity Shares : - (i) when only after Shares are sold.

Dividend Capitalization Method is more appropriate

$$\text{Dividend per Share} = \frac{\text{Earnings} \times \text{Distribution ratio}}{\text{No. of Equity Shares}}$$

$$\begin{aligned}
 \text{Chelsi Ltd.} &=> \frac{(1000000 - 120000) \times 80\%}{500000} \\
 &= 1.408
 \end{aligned}$$

$$\begin{aligned} \text{Nensi Ltd.} &= \frac{(1000000 - 240000) \times 80\%}{4000000} \\ &= 1.52 \end{aligned}$$

Valuation of Shares : -

$$\begin{aligned} \text{Chelsi Ltd.} &= \frac{1.408}{1.5} \times 10 = \text{Rs. } 9.39 \\ &\quad (10 \times 15\%) \end{aligned}$$

$$\text{Nensi Ltd.} = \frac{1.52}{1.5} \times 10 = \text{Rs. } 10.13$$

- (ii) When Controlling Shares are to be sold : -
(EPS capitalization method is more appropriate)

$$\text{Value of Equity Share} = \frac{\text{EPS}}{\text{Market Capitalization Rate}} \times 100$$

Particulars	Chelsi Ltd.	Nensi Ltd.
Profit after tax	1000000	1000000
Less : Preference dividend	<u>120000</u>	<u>240000</u>
Profit available for equity shareholders	880000	760000
No. of equity shares	500000	400000
EPS	= 1.76	1.9
Value of equity shares =	1.76 ----- x 10 1.5 = Rs. 11.73	1.9 ----- x 10 1.5 = Rs. 12.67

Ans. 3 (b) Since it would take quite some time for the Company to get its income assessed; it is usual to provide some amount for income tax on profits at current rates of taxation. Such provision is debited to Profit and Loss A/c above the line and credited to 'Provision for Taxation A/c' which appears in the Balance Sheet under the head "Current liabilities and Provisions."

Just as provision is made this year, provision would have been made the previous year and such provisions called 'old provision' would appear in the Trial Balance on the credit side. When such a provision exists income tax paid must be debited to provision account and not to Profit and Loss Account. If the old provision is in excess of income tax paid, such surplus provision should be shown on the credit side of Profit and Loss Account below the line. Likewise if old provision is not sufficient, further debit is made to Profit and Loss Account below the line. These adjustments are shown below the line that the current profits may not be affected due to these items.

Ans. 3 (c) Journal entries in the books of Ronny Ltd.
(For forfeiture of shares)

Share Capital A/c	- Dr. (200 x 8)	1600	
To Forfeited shares A/c	(200 x 5)		1000
To Share first call A/c	(200 x 3)		600

(Being forfeiture of shares of a shareholder)

(At the time of Reissue)

Bank A/c	--- Dr. (150 x 8)	1200	
Forfeited Shares A/c	--- Dr.	300	
To Share Capital A/c (150 x 10)			1500

(Being reissue of 150 shares of Rs.10 each credited as fully paid for Rs.8 per share)

Forfeited Shares A/c	-- Dr.	450	
To Capital Reserve A/c			450
(150 x 5 – 300 = 450)			
(Being profit on reissue of 150 forfeited shares is transferred to capital reserve)			

QN 4. (a) Anuj Ltd. had an accumulated amount, of general n-serve of Rs. 5,00,000. The directors of Anuj Ltd. decided to declare bonus shares out of the general reserve and to utilise the dividend in the following manner.

- To make: 10,000 partly paid sharers of Rs.10 each paid-up at Rs.12 each, as fully paid-up.
- To distribute 4 fully paid bonus shares of Rs.10 each at Rs.12 each, for 5 fully paid existing 20,000 shares of Rs.10 each.

Show journal entries in the books of Anuj Ltd. to give effect to the above adjustments. (6 marks)

(b) "Issue of bonus shares by the subsidiary company does not affect the cost of control." Comment. (6 marks)

(c) "Accounting Standards are mandatory for all companies." Comment. (3 marks)

Ans. 4 (a) Journal Entries in the books Anuj Ltd.

General Reserve A/c	-- Dr. (10000 x 4)	40000	
To Equity Share Capital A/c			40000
(Being partly paid shares commuted into fully paid up shares the amount being transferred from general reserve)			

General Reserve A/c	-- Dr.	192000	
To Bonus to shareholders A/c			192000
(Being general reserve used to issue bonus shares)			

Bonus to Shareholders A/c	-- Dr.	192000	
To Equity Share Capital A/c			192000
(Being bonus shares issued for consideration other than cash 4 shares for every 5 shares hold for existing 20000 shares of Rs.10 each at Rs.12 each)			

$$\frac{4}{5} (20000 \times 12 = 192000)$$

Ans. 4 (b) "Issue of bonus shares by the Subsidiary Company does not affect the cost of control". This statement is correct. Since if Subsidiary Company issues shares then Holding Company will also get a part of bonus shares of Subsidiary Company in the proportion of Share Capital held by it in Subsidiary and the Holding Company will remain the ultimate Holding Company even after issue of bonus shares by the subsidiary.

For eg :- If A Ltd is the Holding Company and B Ltd is the Subsidiary Company; A Ltd holds 60% of the Share Capital of the Subsidiary Company. Now if B Ltd (Subsidiary Company) issues bonus shares in the ratio of 1 share for every 5 shares hold and existing Share Capital of B Ltd is Rs.100000 (10000 shares of Rs.10 each hence B Ltd will issue 10000 x 1/5 = 2000 shares and A Ltd's share = 2000 shares x 60% = 1200 shares

Hence A Ltd's total investment in B Ltd.
= 100000 x 60% = Rs. 60000 + Bonus shares Rs.12000

$$\begin{array}{rcl} & & \text{Rs. 12000} \\ 1200 \text{ shares of Rs.10 each} = & & \text{-----} \\ & & \text{Rs. 72000} \end{array}$$

Minorities Interest = Rs.100000 x 40% = 40000
+ Bonus shares = 800 shares x 10 = 8000 = 48000

Hence Holding Company remains Holding Company even after the issue of bonus shares by Subsidiary Company.

Ans. 4 (c) The notified Accounting Standards are mandatory for all Companies and their auditors except as exempted / related to SMCs.

Exemptions/relations to SMCs – The SMCs are given the following relaxation in complying the notified Accounting Standards -

- SMCs need not prepare Cash Flow Statement as per AS-3 and need not to disclose the segment reporting as per AS-17.
- The SMCs have been given following relaxation as regards AS-15 "Employee Benefits"
 - SMCs need not comply paras 11 to 16 of AS-15 to extent that deal with recognition and measurement of short-term accumulated compensating absences.
 - Discounting the amount payable after 12 months of Balance Sheet as regards defined contribution plans and termination benefits.
 - Recognition, measurement and disclosure principles in respect of defined benefit plans and other long-term employee benefits plan. However such enterprises should provide and disclose the accrued liability in respect of defined benefit plan and other long-term employee benefit plan as per actuarial valuation based on projected unit credit method and discount rate based on yield on Government bonds.
- SMCs need not disclose diluted EPS as per AS-20 "Earning Per Share".
- SMCs need not comply with disclosure requirements regarding operating leases of sub-paras (b) & (d) of para 46 and sub-paras (a), (b) & (e) of para 25 of AS-19 "Leases" and sub-paras (a) & (f) of para 37 and sub-paras (c), (e) & (f) of para 22 of AS-19 regarding disclosure for finance lease by the lessor and lessee respectively.
- Value in use has been differently defined for SMCs which provides and alternate to calculate value in use based on a reasonable estimate of future cash flows.
- SMCs are exempt from disclosure requirements of paras 66 and 67 of AS-29 regarding provisions and its descriptions.

QN. 5. (a) State, with reasons in brief, whether the following statements are correct, or incorrect :

- (i) All long-term costs are controllable.
- (ii) Rent on own building is not included in cost accounts.
- (iii) Under differential piece rate of incentive scheme, there is no encouragement to improve the performance of the workers.
- (iv) By job rotation, labour turnover can be controlled/reduced upto some extent.
- (v) Administration overheads are incurred due to management policy and they are easily controllable.

(2 marks each)

(b) Choose the most appropriate answer from the given options in respect of the following :

- (i) The most suitable cost system where the products differ in type of materials and work performed is —
 - (a) Job costing
 - (b) Process costing
 - (c) Operating costing
 - (d) None of the above.
- (ii) Current liabilities are equal to —
 - (a) Working capital + current assets
 - (b) Working capital - current assets
 - (c) Current assets - working capital
 - (d) Current assets + working capital,
- (iii) Non-controllable cost is the cost which —
 - (a) Is not subject to control at any level of managerial supervision
 - (b) Cannot be controllable (during a particular financial year)
 - (c) Cannot be controllable at any cost
 - (d) None of the above,

- (iv) Re-ordering level is equal to —
- Maximum consumption x minimum re-order period
 - Maximum consumption x maximum re-order period
 - Minimum consumption x minimum re-order period
 - Normal usage x normal delivery period.
- (v) A budget designed to remain unchanged irrespective of the level of activity actually attained is called.-- .
- Master budget
 - Fixed budget
 - Current budget
 - Flexible budget.
- (1 mark each)

(c) Re-write the following sentences after filling-in the blank spaces with appropriate word(s)/figures) :

- Material losses due to abnormal reasons should be transferred to
 - determines the priorities of functional budgets,
 - The ratio of total liquid assets to current liabilities is known as
 - Break-even chart is the graphical relationship between
 - is the allotment of proportion of items of cost to cost centre/cost units.
- (1 mark each)

Ans. 5 (a)

- Correct; in long run all costs are controllable, since no cost is fixed all are variable in long run and moreover no cost are uncontrollable it is only in relation to a specified individual that we may specify a particular cost either controllable or uncontrollable.
- Incorrect; Rent of own building is a notional or imputed cost; and it is also included in Cost Account.
- Incorrect, since in differential piece rate of incentive system higher reward is paid to efficient maker hence it acts as an encouragement to improve the performance of workers.
- True; Job rotation leads to change in monotonous job of workers which controls labour turnover to a certain extent since workers requirements of better jobs are fulfilled.
- True; Administration overheads are indirect and covers all expenditure incurred in formulating the policy, directing the organization and controlling the operations of a concern; and they can be controlled by the management.

Ans. 5 (b)

- (a) Job Costing
- (b) Working Capital – Current Assets
- (d) None of the above
- (b) Maximum Consumption x Maximum Reorder Period
- (a) Master Budget

Ans. 5 (c)

- Costing Profit and Loss Account
- Functions
- Acid Test Ratio
- Cost and sale
- Allocations

QN. 6 (a) The sales turnover and profit during two periods were as follows :

Period- 1 ---- Sales : Rs.20 lakh; and Profit : Rs.2 lakh
Period- 2 ---- Sales : Rs.30 lakh; and Profit : Rs. 4 lakh

Calculate :

- P/V ratio;
 - Sales required to earn a profit of Rs. 5 lakh; and
 - Profit when sales are Rs.10 lakh,
- (6 marks)

(b) The total overhead expenses of a factory are Rs. 4,46,380. Taking into account the normal working of the factory, overheads were recovered from production at Rs.1.25 per hour. The actual hours worked were 2,93,104. How would you proceed to close the books of account, assuming that besides 7,800 units produced of which 7,000 were sold ? There were 200 equivalent units in work-in-progress.

On investigation, it was found that 50% of the unabsorbed overheads were on account of increase in the cost of indirect material and indirect labour and the other 50% was due to factory's inefficiency.

(6 marks)

(c) What are the limitations of 'management accounting' ?

(3 marks)

Ans. 6 (a)

$$\begin{aligned} \text{i) P/v ratio} &= \frac{\text{Change in Profit}}{\text{Change in Sale}} \\ &= \frac{4 - 2}{30 - 20} = 20\% \end{aligned}$$

Working Notes	Period I	Period II
Sales	20	30
(-) V. Cost (80%)	<u>16</u>	<u>24</u>
Contribution	4	6
(-) Fixed Cost (B/F)	<u>2</u>	<u>2</u>
Profit	2	4

$$\begin{aligned} \text{ii) Required Sale} &= \frac{\text{Profit} + \text{Fixed Cost}}{\text{P/v ratio}} \\ &= \frac{5 + 2}{20\%} \\ &= 35 \text{ Lakh.} \end{aligned}$$

$$\begin{aligned} \text{iii) Sales} &= 10 \text{ lakh.} \\ (-) \text{ v. cost } 80\% & \quad 8 \text{ lakh} \\ & \quad \text{-----} \\ & \quad 2 \text{ lakh} \\ (-) \text{ Fixed cost} & \quad 2 \text{ lakh} \\ & \quad \text{-----} \\ \text{Profit} & \quad \text{Nil} \end{aligned}$$

Ans. 6 (b) Calculation of under/over absorption of overheads.

Total overhead incurred.	446380
(-) Overheads absorbed (293104 x 1.25)	<u>366380</u>
<u>Under absorption</u>	80000

Treatment of under absorption overheads

50% of 80,000 = 40,000 due to increase in cost therefore we should applied supplementary rate

1. Finished goods Stock 800 unit
2. Cost of goods Sold 7000 unit
3. Work in progress 200 unit

$$\begin{aligned} \text{We absorbed in finished good Stock} &= \frac{40,000}{8000} \times 800 = 4000 \text{ /-} \end{aligned}$$

$$\begin{aligned} \text{We absorbed in Cost of goods Sold} &= \frac{40,000}{8000} \times 7000 = 35000 \text{ /-} \end{aligned}$$

$$\begin{aligned} \text{We absorbed in work in progress} &= \frac{40,000}{8000} \times 200 = 1000 \text{ /-} \end{aligned}$$

Balance 50% of 80,000 = 40,000 arise due to factories inefficiency therefore we transfer Rs.40,000 to Costing P/L A/c.

Ans. 6 (c) The Management Accountant has the responsibility of producing and providing dependable Accounting and other relevant data for the use of management. However, the information and reports presented by Management Accountant still suffers from the following limitations:

- (1) Different meaning of the same term: In Accounting different terms carry different meanings under different set of circumstances and conditions. Such meanings and figures may superficially resemble one another and a person who is not, familiar with them may easily become confused or frustrated. The most common source of confusion is the word 'cost'. There are historical costs, full costs, direct costs, variable costs, standard costs, original costs, residual costs, net costs, differential costs, opportunity costs, estimated cost and incremental costs.
- (2) Management Accounting data cannot be completely accurate in all respects. A good deal of approximation is involved in the compilation and preparation of such data. The smaller the time gap between the happening and reporting of an event, the greater will be the approximation. In addition, in the working out of the estimates and future costs, approximation
- (3) Incompleteness of the data: Management Accountant can provide only the quantitative data as far as available, to the management. Business problems and their decisions often require additional quantitative as well as qualitative data which may be outside the purview of the management accountant. For example, the management Accounting data will not disclose the extent to which the quality and utility of a product is affected by the changes in materials or methods of production.
- (4) Importance of proper Management action: A management accountant may provide information and figures in most appropriate form to the management. But figures themselves are nothing more than marks on pieces of paper, and by themselves they accomplish nothing. Anything that the business accomplishes is the result of action of the people.

Qn. 7 (a) A worker under the- Halsey Plan of remuneration has a day rate of Rs. 1,200 per week of 48 hours, plus a cost of living bonus of Its. 10 per hour worked. He is given an 8-hour task to perform, winch he accomplishes in 6 hours. He is allowed 30% of the time saved as premium bonus. What would he his total hourly rate of earnings, and what difference would it make if he wore paid under the Rowan Plan ? (6 marks)

(b) A chemical manufacturing unit, uses Material-A as the basic material. The cost of .Material-A is Rs.20 per kg. and the input-output ratio is 12%. Due to a sudden shortage in the market, Material-A becomes non-available and the manufacturing unit is considering the use of one of the following substitutes available :

Material	Material Input-Output Ratio	Rs. Per Kg.
B ₁	135%	26
B ₂	115%	30

You are required to recommend which of the above substitutes is to be used. Also indicate additional cost required to be incurred, (6 marks)

(c) Write a note on 'zero base budgeting' (ZBB). (3 marks)

Ans. 7 (a) Under Halsey Plan :

Day rate 1200 per week of 48 hours

1200

∴ Rate per hours = $\frac{1200}{48}$ = 25/- per hour

Time allowed = 8 hours.

Time taken = 6 hours.

Time saved = 2 hours.

Total wages = Guaranteed wages + Bonus + Cost of living Bonus
 = (6 × 25) + (2 × 30% × 25) + (10 × 6)
 = 150 + 15 + 60
 = 225 /-

225

Total hourly rate of earning = $\frac{225}{6}$ = 37.50 /-

Under Rowan Plan

$$\begin{aligned}
 \text{Total wages} &= \text{Guaranteed wages} + \text{Bonus} + \text{Cost of living Bonus} \\
 &= \frac{25 \times 6}{8} + \left(\frac{25}{8} \times 6 \times 25 \right) + (10 \times 6) \\
 &= 150 + 37.5 + 60 \\
 &= 247.50 \\
 \text{Total hourly rate of Earning} &= \frac{247.5}{6} \\
 &= 41.25 \text{ /-}
 \end{aligned}$$

<u>Q7(b) Material</u>	<u>Cost</u>	<u>input output ratio</u>
A	20/-	120%
<u>Substitutes</u>		
B ₁	26/-	135%
B ₂	30/-	115%

As given in question if

Mat A => Input = 1 kg output = 1.2 kg
Cost = Rs.20 for 1.2 kg output;

Since, due to shortage of material A either of the substitutes B₁ or B₂ is to be used in place of material A.

Material B₁ → If input = 1 kg output 1.35 kg cost = 26 Rs. for 1.35 kg output.

Material B₂ →

If input = 1 kg output = 1.15 kg cost = Rs.30 for 1.15 kg output

As can be seen from above material B₁ is cheaper as compared to material B₂ and also output produced per kg of input is also favourable of material B₁ compared to material B₂. Hence material A should be substituted with material B₁.

Ans. 7(c) Zero base budgeting is a revolutionary concept of planning the future activities and there is a sharp contradiction from conventional budgeting. Zero base budgeting, may be better termed as "De nova budgeting" or budgeting from the beginning without any reference to any base-past budgets and actual happening. Zero base budgeting may be defined as "a planning and budgeting process which requires each manager to justify his entire budget request in detail from scratch (hence zero base) and shifts the burden of proof to each manager to justify why he should spend any money at all.

Zero-base budgeting is based on the premise that every rupee of expenditure requires justification. The traditional budgeting approach includes expenditures of previous year which are automatically incorporated in new budget proposals and only increments are subjected to debate. Zero base budgeting assumes that a responsibility centre manager has had no previous expenditure. Important features of zero-base budgeting are:

- Concentration of efforts is not simply on "how much" a unit will spend but "why" it needs to spend.
- Choices are made on the basis of what each unit can offer for a specific cost, (iii) Individual unit's objects are linked to corporate targets.
- Quick budget adjustments can be made if, during the operating year costs are required to maintain expenditure level.
- Alternative ways are considered.
- Participation of all levels in decision-making.

QN 8. (a) From the following information provided by Jolly Ltd., you are required to prepare the balance sheet :

Current ratio	2.5
Liquidity ratio	1.5
Proprietary ratio	0.75
Working capital	Rs. 6, 00,000
Re-serves and surplus	Rs. 4,00,000
Bank overdraft	Rs. 1,00,000

There is no long-term loan or fictitious assets. You are also required to show the necessary working notes. (6 marks)

- (b) What are the benefits of cash flow statement?
Mention the parties who are benefited from preparing cash flow statement. (6 marks)
- (c) What is 'margin of safety'? How may it be improved? (3 marks)

Ans. 8 (a) Balance Sheet of Jolly Ltd.

Liabilities	Amount	Assets	Amount
Equity share Capital	800000	Fixed Assets (B/F)	600000
Reserve & Surplus	400000	<u>Current Assets</u>	
Bank Overdraft	100000	Stock	400000
Other Current Liabilities	300000	Debtors	600000
	<u>1600000</u>		<u>1600000</u>

Working Notes –

(i) Working Capital = Rs. 6,00,000/-

$$\text{Current ratio} = 2.5 = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Working Capital} = \text{Current Assets} - \text{Current liabilities}$$

$$\Rightarrow 6,00,000 = 2.5 \text{ Current liabilities} - \text{Current liabilities.}$$

$$\Rightarrow 6,00,000 = 1.5 \text{ Current liabilities}$$

$$\Rightarrow \text{Current liabilities} = \frac{6,00,000}{1.5}$$

$$\Rightarrow \text{Current liabilities} = 4,00,000 \text{ /-}$$

$$\therefore \text{Current Assets} = 2.5 \times 4,00,000 = 10,00,000 \text{ /-}$$

$$\text{Current Assets} - \text{Stock}$$

$$\text{Liquidity ratio} = \frac{10,00,000 - \text{Stock}}{\text{Current Liabilities}}$$

$$\Rightarrow 1.5 = \frac{10,00,000 - \text{Stock}}{4,00,000}$$

$$\Rightarrow \text{Stock} = 10,00,000 - 6,00,000 = 4,00,000$$

$$\text{Current Liabilities} = 4,00,000$$

$$= \text{Bank Overdraft} + \text{other Current Liabilities}$$

$$= 1,00,000 + 3,00,000$$

$$\text{Proprietary Ratio} = 0.75$$

$$= \frac{\text{Equity share Capital} + \text{Reserve \& Surplus} - \text{Fictitious Assets}}{\text{Equity share Capital} + 4,00,000 - \text{NIL}}$$

$$0.75 = \frac{\text{Equity share Capital} + 4,00,000 - \text{NIL}}{\text{Equity share Capital} + 4,00,000 - \text{NIL}}$$

$$\text{Total of liabilities side} = \text{Equity Share capital} + \text{Reserve \& Surplus} + \text{Current liabilities.}$$

$$\text{If Equity share Capital} + \text{Reserve \& Surplus is equal to } 0.75$$

$$\text{Therefore Current liabilities is equal to } .25$$

$$4,00,000$$

$$\therefore \text{Total of Liabilities side} = \frac{4,00,000}{.25}$$

$$= 16,00,000$$

$$\therefore \text{Equity share Capital} = 16,00,000 - (4,00,000 + 1,00,000 + 3,00,000)$$

$$= 8,00,000 \text{ /-}$$

Ans. 8 (b) This information is important to Shareholders, part of whose investment return (dividends) is dependent on cash flows and to lenders, whose interest payment and principal repayment require the use of cash. The welfare of other constituents of a company including its employees, its suppliers, and the local bodies that may levy taxes on it, depends to varying degrees on the company's activity to generate adequate cash flows to fulfill its financial obligations. The usefulness of Cash Flow Statement can be summarized as follows:

- (i) Predict future cash flows: The Cash Flow Statement makes it possible to predict the amounts, timing and uncertainty of future cash flows on the basis of what has happened in the past. This approach is better than accrual basis data presented by profit and loss account and the balance sheet.
- (ii) Determine the ability to pay dividends and other commitments: A Cash Flow Statement indicates the sources and uses of cash under suitable headings such as operating, investing and financing activities. Shareholders are interested in receiving dividends on their investments in the shares. Creditors want to receive their interest and principal amount on time. The statement of cash flows helps investors and creditors to predict whether the business can make these payments.
- (iii) Show the relationship of net income to changes in the business cash: Usually cash and net income move together. High levels of income tend to lead to increase in cash and *vice-versa*. However, a company's cash balance can decrease when its net income is high, and cash can increase when income is low. The users want to know the difference between the net profit and net cash provided by operations. The net profit shows the progress of the business during the year while cash flow relates more to the liquidity of the business. The users can assess the reliability of net profit with the help of cash flow statement.
- (iv) Efficiency in cash management: Cash flow analysis helps in evaluating financial policies and cash position. It facilitates the management to plan and co-ordinate the financial operations properly. The management can estimate how much funds are needed, from which source they will be derived, how much can be generated internally and how much should be arranged from outside.
- (v) Discloses the movement cash: A comparison of cash flow statement for the previous year with the budget for that year would indicate to what extent the resources of the enterprise were raised and applied. A comparison of the original forecast with actual result may highlight trend of movement that might otherwise undetected.
- (vi) Discloses success or failure of cash planning: A success or failure of cash planning can be known by comparing the projected cash flow statement with the actual cash flow statement and necessary remedial measures can be taken. Moreover it provides a better measure for inter-period and inter-firm comparison.
- (vii) Evaluate management decisions: The statement of cash flows reports the companies' investing and financing activities and thus gives the investors and creditors about cash flow information for evaluating managers' decisions.

Ans. 8 (c) Margin of safety is the difference between the actual sales and sales at break-even int. Sales beyond break-even volume brings in profits. Such Sales represent a Margin of Safety. Margin of Safety is calculated as follows:

Margin of Safety = Total sales - Break even Sales

Margin of Safety can also be calculated with the help of P/V ratio i.e.

$$\text{Margin of Safety} = \frac{\text{Profit}}{\text{P/V ratio}}$$

Margin of Safety can also be expressed as percentage of Sales

$$\text{i.e.} \quad \frac{\text{Margin of Safety} \times 100}{\text{Total Sales}}$$

It is important that there should be reasonable Margin of Safety, otherwise, a reduced level of activity may prove disastrous. The soundness of a business is gauged by the size of the margin of safety. A low margin of safety usually indicates high fixed overheads so that profits are not made until there is a high level of activity to absorb fixed costs.

A high Margin of Safety shows that break-even point is much below the actual sales, so that even if there is a fall in sales, there will still be a point. A low margin of safety is accompanied by high fixed costs, so action is called for reducing the fixed costs or increasing sales volume.