

**PAPER 2: MANAGEMENT ACCOUNTING AND FINANCIAL ANALYSIS
NOVEMBER 2005**

Question No.1 is compulsory

Answer any four questions from the rest.

Figures in the margin indicate marks allotted to each question.

Working notes should form part of the answer.

Question 1

- (a) Engineers Ltd. is in the business of manufacturing nut bolts. Some more product lines are being planned to be added to the existing system. The machinery required may be bought or may be taken on lease. The cost of machine is Rs. 20,00,000 having a useful life of 5 years with the salvage value of Rs. 4,00,000 (consider short term capital loss/gain for the Income tax). The full purchase value of machine can be financed by bank loan at the rate of 20% interest repayable in five equal installments falling due at the end of each year. Alternatively, the machine can be procured on a 5 years lease, year-end lease rentals being Rs. 6,00,000 per annum. The Company follows the written down value method of depreciation at the rate of 25 per cent. Company's tax rate is 35 per cent and cost of capital is 14 per cent.

i. Advise the company which option it should choose-lease or borrow.

ii. Assess the proposal from the lessor's point of view examining whether leasing the machine is financially viable at 14 per cent cost of capital.

Detailed working notes should be given.

(14 Marks)

- (b) Determine the risk adjusted net present value of the following projects:

(6 Marks)

	X	Y	Z
Net cash outlays (Rs.)	2,10,000	1,20,000	1,00,000
Project life	5 years	5 years	5 years
Annual Cash Inflow (Rs.)	70,000	42,000	30,000
Coefficient of variation	1.2	0.8	0.4

The Company selects the risk adjusted rate of discount on the basis of the coefficient of variation:

Coefficient of variation	Risk – Adjusted rate of return	P.V. Factor 1 to 5 years at risk adjusted rate of discount
0.0	10%	3.791
0.4	12%	3.605
0.8	14%	3.43
1.2	16%	3.274
1.6	18%	3.127
2.0	22%	2.864
More than 2.0	25%	2.689

Question 2

- (a) Sun Moon Mutual Fund (approved Mutual Fund) sponsored open-ended equity oriented scheme “Chankakya Opportunity Fund”. There were three plans viz., “A” Dividend Re-investment plan, “B”- Bonus Plan & “C” – Growth Plan.

At the time of initial Public Offer on 1-4-1995, Mr.Anand, Mr.Bacchan & Mrs.Charu, three investors invested Rs.1,00,000 each & chosen “B”, “C” & “A” Plan respectively.

The history of the Fund is as follows:

Date	Dividend %	Bonus ratio	Net asst value per unit (F.V.Rs.10)		
			Plan A	Plan B	Plan C
28-07-1999	20		30.70	31.40	33.42
31-03-2000	70	5:4	58.42	31.05	70.05
31-10-2003	40		42.18	25.02	56.15
15-03-2004	25		46.45	29.10	64.28

31-03-2004		1:3	42.18	20.05	60.12
24-03-2005	40	1:4	48.10	19.95	72.40
31-07-2005			53.75	22.98	82.07

On 31st July all three investors redeemed all the balance units.

Calculate annual rate of return to each of the investors.

(12 Marks)

Consider:

1. Long term capital gain is exempt from Income tax.
2. Short term capital gain is subject to 10% Income tax.
3. Security transaction tax 0.2 percent only on sale / redemption of units.
4. Ignore education cess.

- (b) Following information is available in respect of dividend, market price and market condition after one year

(8 Marks)

Market condition	Probability	Market price	Dividend per share
Good	0.25	115	9
Normal	0.50	107	5
Bad	0.25	97	3

The existing market price of an equity share is Rs.106 (F.V.Re.1), which is cum 10% bonus debenture of Rs.6 each, per share. M/s. X Finance Company Ltd., has offered the buy-back of debentures at face value.

Find out the expected return and variability of returns of the equity shares.

And also advise- whether to accept buy back offer?

Question 3

(a)

- i. What is interest rate risk, reinvestment risk & default risk & what are the types of risk involved in investment in G.Sec.?
- ii. What is a Repo and a Reverse Repo?

(3 Marks)

(2 Marks)

- (b) You as a dealer in foreign exchange have the following position in Swiss France on 31st October, 2004:

(8 Marks)

	Sw.Fcs.
Balance in the Nostro A/c Credit	1,00,000
Opening Position Over bought	50,000
Purchased a bill on Zurich	80,000
Sold forward TT	60,000
Forward purchase contract cancelled	30,000
Remitted by TT	75,000
Draft on Zurich cancelled	30,000

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

- (c) The following information relating to Fortune India Ltd., having two divisions, viz, Pharma Division and Fast Moving Consumer Goods Division (FMCG Division). Paid up share capital of Fortune India Ltd., is consisting of 3,000 Lakhs equity shares of Re.1 each. Fortune India Ltd., decided to de-merge Pharma Division as Fortune Pharma Ltd., w.e.f.1-4-2005. Details of Fortune India Ltd., as on 31-3-2005 and of Fortune Pharma Ltd., as on 1-4-2005 are given below:

Particulars	Fortune Pharma Ltd.,	Fortune India Ltd.,
	Rs	Rs
Outside liabilities		
Secured loans	400 lakh	3,000 lakh

Unsecured loans	2,400 lakh	800 lakh
Current liabilities & provisions	1,300 lakh	21,200 lakh
Assets		
Fixed assets	7,740 lakh	20,400 lakh
Investments	7,600 lakh	12,300 lakh
Current assets	8,800 lakh	30,200 lakh
Loans & advances	900 lakh	7,300 lakh
Deferred tax / misc. exp.	60 lakh	(200)lakh

Board of Directors of the Company have decided to issue necessary equity shares of Fortune Pharma Ltd., of Re.1 each, without any consideration to the shareholders of Fortune India Ltd., For that following points are to be considered:

1. Transfer of Liabilities & Assets at Book Value.
2. Estimated Profit for the year 2005-06 is Rs.11,400 lakh for Fortune India Ltd., & Rs.1,470 lakh for Fortune Pharma Ltd.,
3. Estimated Market Price of Fortune Pharma Ltd., is ra.24.50 per share.
4. Average P/E ratio of FMCG sector is 42 & Pharma sector is 25, which is to be expected for both the companies.

Question 4

- (a) What are the investor's rights & obligations under the Mutual Fund Regulations? Explain different methods for evaluating the performance of Mutual Fund. **(8 Marls)**
- (b) The Investment portfolio of a bank is as follows: **(8 Marls)**

Government Bond	Coupon rate	Purchase rate (F.V. Rs.100 per Bond)	Duration (Years)
G.O.I 2006	11.68	106.50	3.50
G.O.I 2010	7.55	105.00	6.50
G.O.I 2015	7.38	105.00	7.50
G.O.I 2022	8.35	110.00	8.75
G.O.I 2032	7.95	101.00	13.00

Face value of total investment is Rs.5 crores in each Government Bond.

Calculate actual investment in portfolio.

What is suitable action to churn out investment portfolio in the following scenario?

1. Interest rates are expected to lower by 25 basis points
2. Interest rates are expected to raise by 75 basis points.

Also calculate the revised duration of investment portfolio in each scenario.

- (c) You sold Hong Kong Dollar 1,00,00,000 value spot to your customer at Rs.5.70 & covered yourself in London market on the same day, when the exchange rates were **(4 Marks)**

US \$ 1	=	7.5880	7.5920	
local inter bank market rates for US \$ were				
Spot US \$ 1	=	42.70	42.85	

Calculate cover rate & ascertain the profit or los in the transaction ignore brokerage.

Question 5

- (a) The following data are available for a bond.

(8 Marks)

Face value	Rs.1,000
Coupon rate	16%
Years to Maturity	6
Redemption value	Rs.1,000
Yield to maturity	17%

What is the current market price, duration and volatility of this bond? Calculate the expected market price, if increase in required yield by 75 basis points..

(b) Explain the terms ESOS and ESPS with reference to the SEBI guidelines for The Employees Stock Option Plans(ESOPs) **(4 Marks)**

(c) Your cline is holding the following securities: **(8 Marks)**

Particulars of securities	Cost	Dividends / Interest	Market Price	Beta
Equity shares:				
Gold Ltd.,	10,000	1,725	9,800	0.6
Silver Ltd.,	15,000	1,000	16,200	0.8
Bronze Ltd.,	14,000	700	20,000	0.6
GOI Bonds	36,000	3,600	34,500	1.0

Average return of the portfolio is 15.7% , calculate:

- Expected rate of return in each, using the Capital Asset Pricing Model (CAPM).
- Risk free rate of return.

Question 6

(a) What is Securitization? What are its various instruments? **(5 Marks)**

(b) M/s. Transindia Ltd., is contemplating calling Rs.3 crores of 30Year's, Rs.1,000 bond issued 5 years ago with a coupon interest rate 14 percent. The bonds have a call price of Rs.1,140 and had initially collected proceeds of Rs.2.91 crores due to a discount of Rs.30 per bond. The initial floating cost was Rs.3,60,000. the company intends to sell Rs. 3 crores of 12 per cent coupon rate, 25 years bonds to raise funds for retiring the old bonds. It proposes to sell the new bonds at their par value of Rs.1,000. The estimated floatation cost is Rs.4,00,000. The company is paying 40% tax and its after cost of debt is 8 per cent. As the new bonds must first be sold and their proceeds, then used to retire old bonds, the company expects a two months period of overlapping interest during which interest must be paid on both the old and new bonds. **(5 Marks)**

(c) Write a brief note on external commercial borrowings. **(5 Marks)**