

**PAPER 2- MANAGEMENT ACCOUNTING AND FINANCIAL ANALYSIS
NOVEMBER 2006**

Question no. 1 is compulsory
Answer any four from the rest.

Working notes should form part of the answer.

Question 1

(a) Following are the estimates of the nest cash flows and probability of a new project of M/s.X Ltd., :

(16 Marks)

	Year	P = 0.3	P = 0.5	P = 0.2
Initial investment	0	4,00,000	4,00,000	4,00,000
Estimated net after tax cash inflows per year	1 to 5	1,00,000	1,10,000	1,20,000
Estimated salvage value (after tax)	5	20,000	50,000	60,000

Required rate of return from the project is 10%. Find :

- (i) The expected NPV of the Project
- (ii) The best case and the worst case NPVs.
- (iii) The probability of occurrence of the worst case, if the cash flows are
 - a. Perfectly dependent overtime
 - b. Independent overtime.
- (iv) Standard deviation and coefficient of variation assuming that there are only three streams of cash flow, which are represented by each column of the table with the given probabilities.
- (v) Coefficient of variation of X Ltd., on its average project which is in the range of 0.95 to 1.0. If the coefficient of variation of the project is found to be less riskier than average, 100 basis points are deducted from the Company's cost of Capital.

Should the project be accepted by X Ltd.?

(b) What is a re-financing ? Briefly explain indicating at least two institutions which offer such re-financing.

(4 Marks)

Question 2

(a) ABC Ltd., has 50,000 outstanding shares. The current market price per share is Rs. 100 each. It hopes to make a net income of Rs.5,00,000 at the end of current year. The Company's Board is considering a dividend of Rs.5 per share at the end of current financial year. The company needs to raise Rs.10,00,000 for an approved investment expenditure. The company belongs to a risk class for which the capitalization rate is 10%. Show, how does the M-M approach affect the value of firm if the dividends are paid or not paid.

(6 Marks)

(b) Mr.X on 1.7.2000, 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 M.F. was 10% and Mr.X found that his annualized yield was 153.33%. On 31.12.2002, 20% dividend was given. On 31.3.2003 Mr.X redeemed all his balance of 11,296. 11 units when his annualized yield was 73.52%. What are the NAVs as on 31.3.2001, 31.12.2002 and 31.3.2003?

(6 Marks)

(c) How tax considerations are relevant in the context of a dividend decision of a company?

(4 Marks)

(d) Explain briefly the advantages of holding securities in "demat" form rather than in physical form.

(4 Marks)

Question 3

- (a) XYZ Ltd., is an export oriented business house based in Mumbai. The company invoices in customer's currency. Its receipt of US \$1,00,000 is due on September 1, 2005. **(10 Marks)**

Market information as at June 1, 2005.

US\$/Rs.		US\$/Rs.		Contract size Rs.4,72,000
Spot	0.02140	June	0.02126	
1 month forward	0.02136	September	0.02118	
3 months forward	0.02127			

	Initial Margin	Interest Rates in India
June	Rs.10,000	7.50%
September	Rs.15,000	8.00%

On September 1, 2005 the spot rate US \$ / Re. is 0.02133 and currency future rate is 0.2134. Comment which of the following methods would be most advantageous for XYZ Ltd.,

- (a) Using forward contract
 (b) Using currency futures
 (c) Not hedging currency risks.

It may be assumed that variation in margin would be settled on the maturity of the futures contract.

- (b) Spot rate 1 US \$ = Rs.48.0123 **(5 Marks)**
 180 days Forward rate for 1 US \$ = Rs.48.8190

Annualized interest rate for 6 months – Rupee = 12%

Annualized interest rate for 6 months – US \$ = 8%

Is there any arbitrage possibility? If yes how an arbitrageur can take advantage of the situation, if he is willing to borrow Rs.40,00,000 or US \$ 83,312.

- (c) ABC Ltd., is considering a project in US, which will involve an initial investment of US \$ 1,10,00,000. The project will have 5 years of life. Current spot exchange rate is Rs.48 per US \$. The risk free rate in US is 8% and the same in India is 12%. Cash inflow from the project are as follows: **(5 Marks)**

Year	Cash inflow
1	US \$ 20,00,000
2	US \$ 25,00,000
3	US \$ 30,00,000
4	US \$ 40,00,000
5	US \$ 50,00,000

- (d) Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

Question 4

- (a) From the following data for certain stock, find the value of a call option: **(8 Marks)**

Price of stock now	= Rs.80
Exercise price	= Rs.75
Standard deviation of continuously compounded annual return	= 0.40
Maturity period	= 6 months
Annual interest rate	= 12%
Given	

Number of S.D. from Mean, (z)	Area of the left or right (one tail)
0.25	0.4013
0.30	0.3821

$$e^{0.12 \times 0.05} = 1.0060$$

$$\ln 1.0667 = 0.0645$$

0.55	0.2912
0.60	0.2578

- (b) Following are the details of cash and outflows in foreign currency denominations of MNP Co., an Indian export firm, which have no foreign subsidiaries : **(4 Marks)**

Currency	Inflow	Outflow	Spot rate	Forward rate
US \$	4,00,00,000	2,00,00,000	48.01	48.82
French Franc (FFr)	2,00,00,000	80,00,000	7.45	8.12
U.K.£	3,00,00,000	2,00,00,000	75.57	75.98
Japanese Yen	1,50,00,000	2,50,00,000	3.20	2.40

- Determine the net exposure of each foreign currency in terms of Rupees.
- Are any of the exposure positions offsetting to some extent?

- (c) X Co. Ltd., invested on 1.4.2005 in certain equity shares as below: **(8 Marks)**

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

You are required to:

- Calculate the average return from the portfolio for the year ended 31.3.2006;
- Calculate the expected average return from the portfolio for the year 2006-07 ; and
- Advise X Co., Ltd., of the comparative risk in the two investments by calculating the standard deviation in each case.

Question 5

- (a) AB Ltd., is planning to acquire and absorb the running business of XY Ltd., The valuation is to be based on the recommendation of merchant bankers and the consideration is to be discharged in the form of equity shares to be issued by AB Ltd., As on 31.3.2006, the paid up capital of AB Ltd., consists of 80 lakhs shares of Rs.10 each. The highest and the lowest market quotation during the last 6 months were Rs.570 and Rs.430. For the purpose of the exchange, the price per share is to be reckoned as the average of the highest and lowest market price during the last 6 months ended on 31.3.2006. **(12 Marks)**

XY Ltd.'s Balance Sheet as at 31.3.2006 is summarized below:

Sources	Rs. lakhs
Share capital	
20 lakhs equity shares of Rs.10 each fully paid	200
10 lakhs equity shares of Rs.10 each, Rs.5 paid	50
Loans	100
Total	350
Uses	
Fixed Assets (Net)	150
Net Current Assets	200
	350

An independent firm of merchant bankers engaged for the negotiation, have produced the following estimates of cash flows from the business of XY Ltd.:

Year ended	By way of	Rs. lakhs
31.03.07	After tax earnings for equity	105
31.03.08	Do	120
31.03.09	Do	125
31.03.10	Do	120

31.03.11	Do	100
	Terminal value estimate	200

It is the recommendation of the merchant banker that the business of XY Ltd., may be valued on the basis of the average of (i) Aggregate of discounted cash flows at 8% and (ii) Net assets value. Present value factors at 8% for years

1-5 0.93 0.86 0.79 0.74 0.68

You are required to:

- (i) Calculate the total value of the business of XY Ltd.,
 - (ii) The number of shares to be issued by AB Ltd., ; and
 - (iii) The basis of allocation of the shares among the shareholders of XYZ Ltd.,
- (b) The 6 months forward price of a security is Rs.208.18. The borrowing rate is 8% per annum payable with monthly rests. What should be the spot price? **(4 Marks)**
- (c) An Indian company is desirous of obtaining foreign technology. Write a brief note explaining the important financial consideration it should take into account in this context.

Question 6

- (a) Discuss the various kinds of Systematic and Unsystematic risk. **(6 Marks)**
- (b) A firm has a sales of Rs.6 crores, Variable costs Rs.3.5 crores and Fixed cost of Rs.0.65 crores. The firm has debt and equity resources worth of Rs.7 crores and 10 crores respectively. With the data given show: **(6 Marks)**
 - i. The firm's ROI
 - ii. EBIT if sales decline to Rs.4 crores.
 - iii. If the industry's assets turnover is 4 times, does the firm has high or low asset turnover ? The cost of debt is 10% , ignore taxation.
- (c) What are the characteristic features of Financial and Operating Lease? **(4 Marks)**
- (d) Write short notes on Inter Bank Participation Certificate. **(4 Marks)**