# PAPER 2- MANAGEMENT ACCOUNTING AND FINANCIAL ANALYSIS MAY, 2006 

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) ABC Company had decided to acquire a Rs. $5,00,000$ pulp control device that has a useful life a ten years. A subsidy of Rs. 50,000 is available at the time the device is acquired and placed in to service. The device would be depreciated on straight - line basis and no salvage value is expected. The company is in the 505 tax bracket. If the acquisition is financed wit a lease, lease payments of Rs. 55,000 would be required at the beginning of each year. The company can also borrow at $10 \%$ repayable in equal instalments. Debt payments would be due at the beginning of each year :
(15 Marks)
i. What is the present value of cash outflow for each of these financing alternatives, using the after-tax cost of debt?
ii. Which of the two alternatives is preferable?
(b) A company is considering to engage a factor, the following information is available :
(5 Marks)
i. The current average collection period for the Company's debtors is 80 days and $1 / 2 \%$ of debtors default. The factor has agreed to pay money due after 60 days and will take the responsibility of any loss account of bad debts.
ii. The annual charge for the factoring is $2 \%$ of turnover payable annually in arrears. Administration cost saving is likely to be Rs. $1,00,000$ per annum.
iii. Annual sales, all on credit, are Rs. $1,00,00,000$. Variable cost is $80 \%$ of sales price. The company's cost of borrowing is 155 per annum. Assume the year is consisting of 365 days.
Should the company enter into a factory agreement?

## Question 2

(a) From the following particulars, calculate the effective interest p.a. as well as the total cost of funds to ABC Ltd., which is planning a CP issue:
(6 Marks)

| Issue price of CP | $\rightarrow$ | Rs. 97,350 |
| :--- | :--- | :--- |
| Face value | $\rightarrow$ | Rs. $1,00,000$ |
| Maturity period | $\rightarrow$ | 3 months |
| Issue expenses : |  |  |
| Brokerage | $:$ | $0.125 \%$ for 3 months |
| Rating charges | $:$ | $0.5 \%$ p.a |
| Stamp duty | $:$ | $0.125 \%$ for 3 months. |

(b) Distinguish between:
( $4 \times 2=8$ Marks)
i. Forward and Futures contracts
ii. Intrinsic value and time value of an option.
(c) A Mutual Fund having 300 units has shown in NAV of Rs. 8.75 and Rs. 9.45 at the beginning and at the end of the year respectively. The Mutual Fund has given two options:
(6 Marks)
i. Pay Rs. 0.75 per unit as dividend and Rs. 0.60 per unit as a capital gain, or
ii. These distributions are to be reinvested at an average NAV of Rs.8.65 per unit.

What difference it would make in terms of return available and which option is preferable?

## Question 3

(a)
i.What is Capital rationing ?
( $3 \times 2=6$ Marks)
ii.What is take over by reverse bid?
(b) The distribution of return of security " F " and the market portfolio " P " is given below:
(8 Marks)

| Probability | Return \% |  |
| :---: | :---: | :---: |
|  | F | P |
| 0.30 | 30 | -10 |
| 0.40 | 20 | 20 |
| 0.30 | 0 | 30 |

You are required to calculate the expected return of security " F " and the market portfolio " P ", the covariance between the market portfolio and security and beta for the security.
(c) What is the procedure for the book building process? Explain the recent changes made in the allotment process.
(6 Marks)

## Question 4

(a) The following information pertains to $\mathrm{M} / \mathrm{s}$. XY Ltd.,.
(8 Marks)

| Earnings of the company | Rs. $5,00,000$ |
| :--- | :---: |
| Dividend payment ratio | $60 \%$ |
| No. of shares outstanding | $1,00,000$ |
| Equity capitalization rate | $12 \%$ |
| Rate of return on investment | $15 \%$ |

i. What would be the market value per share as per Walter's model/
ii. What is the optimum dividend payout ratio according to Walter's model and the market value of company's share at that payment ratio. ?
(b) Given the following informations:
(8 Marks)
Exchange rates - Canadian dollar 0.665 per DM (spot) Canadian dollar 0.670 per DM (3 Months)
Interest rates - DM7\% p.a
Canadian Dollar 9\% p.a.
What operations would be carried out to take the possible arbitrage gains?
(c) What is credit rating ?
(4 Marks)

## Question 5

(a) ABC Leasing Ltd., has been approached by a client to write a five years lease on an asset costing Rs. $10,00,000$ and having estimated salvage value of Rs. $1,00,000$ thereafter. The company has a after tax required rate of return of $10 \%$ and its tax rate is $50 \%$. It provides depreciation at $331 / 3 \%$ on written down value of the asset. What lease rental will provide the company its after $t$ ax required rate of return?
(7 Marks)
(b) The market received rumor about ABC corporation's tie - up with a multinational company. This has induced the market price to move up. If the rumor is false, the ABC corporation stock price will probably fall dramatically. To protect from this an investor has bought the call and put options.
He purchased one 3 months call with a striking price of Rs. 42 for Rs. 2 premium, and paid Re. 1 per share premium for a 3 months put with a striking price of Rs. 40 .
i. Determine the Investor's position if the tie up offer bids the price of ABC Corporation's stock up to Rs. 43 in 3 months.
ii. Determine the Investor's ending position, if the tie up programme fails and the price of the stocks falls to Rs. 36 in 3 months.
(c) Briefly explain the objectives of "Portfolio Management".
(6 Marks)

## Question 6

(a) Reliable Industries Ltd., (RIL) is considering a takeover of Sunflower Industries Ltd., (SIL). The particulars of 2 companies are given below:

| Particulars | Reliable Industries Ltd., | Sunflower Industries Ltd., |
| :--- | :---: | :---: |
| Earning after tax (EAT) | Rs. $20,00,000$ | Rs. $10,00,000$ |
| Equity shares O/s | $10,00,000$ | $10,00,000$ |
| Earnings per share (EPS) | 2 | 1 |
| PE ration (Times) | 10 | 5 |

Required :
(i) What is the market value of each Company before merger?
(ii) Assume that the management of RIL estimates that the shareholders of SIL will accept an offer of one share of RIL of our share of SIL. If there are no synergic effects, what is the market value of the post merger RIL? What is the new price per share ? Are the shareholders of RIL better or worse off than they were before the merger?
(iii) Due to synegic effects, the management of RIL estimates that the earnings will increase by $20 \%$. What is the new post-merger EPS and Price per share? Will the shareholders be better off or worse off than before the merger?
(b) Write short notes on :
( $3 \times 2=6$ Marks )
i. Assumptions of CAPM.
ii. Determinants of Dividend policy.
(c) 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 re-purchase 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.
(6 Marks)
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 re-purchased.
(c) The impact of share re-purchase on the EPS, assuming the net income is same.

