## OLD COURSE <br> FINAL COURSE- GROUP I

## PAPER - 2: STRATEGIC FINANCIAL MANAGEMENT SYLLABUS: 50\%

Question paper
Question No. 1 is compulsory. Candidates are also required to answer any five questions from the remaining six questions.

Maximum time: 3 hours
1.
(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 @33.33\% on written down value of the asset. What lease rental will provide the company its after tax required rate of return? ( 5 marks)
(b) The price of a bond just before a year of maturity is $\$ 5,000$. Its redemption value is $\$$ 5,250 at the end of the said period. Interest is $\$ 350$ p.a. The Dollar appreciates by $2 \%$ during the said period. Calculate the rate of return. ( 5 marks)
(c) ABC Company is considering acquisition of XYZ Ltd. which has 1.5 Cr shares outstanding and issued. The market price per share is Rs. 400 at present. ABC's average cost of capital is $12 \%$.Available information from XYZ indicates its expected cash accruals for the next 3 years as follows:

| Year | Rs.Cr |
| :---: | :---: |
| 1 | 250 |
| 2 | 300 |
| 3 | 400 |

Calculate the range of valuation that ABC has to consider. (PV factors at $12 \%$ for years 1 to 3 respectively: 0.893, 0.797 and 0.712 ).
(5 marks)
(d) On the basis of the following information:
Current dividend (Do)
$=\quad$ Rs. 2.50
Discount rate (k)
$=10.5 \%$
Growth rate (g)
$=2 \%$
(i) Calculate the present value of stock of ABC Ltd.
(ii) Is its stock overvalued if stock price is Rs.35, ROE $=9 \%$ and $\mathrm{EPS}=\mathrm{Rs}$. 2.25? Show detailed calculation. (5 marks)

## Question 2:

(a) A\& Co. is contemplating whether to replace an existing machine or to spend money on over hauling it. A\& Co .currently pays no taxes .There placement machine costs Rs.90,000 now and require 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 <br> (Rs) | Salvage <br> (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 A\&Co. is $15 \%$.

## Required:

When should the company replace the machine?
(Notes: Present value of an annuity of Rs. 1 per period for 8 years at interest rate of $15 \%$ : 4.4873; present value of Rs. 1 to be received after 8 years at interest rate of $15 \%$ : 0.3269)(8 marks)
(b) ABC Limited shares are currently selling at Rs. 13 per share. There are $10,00,000$ shares outstanding. The firm is planning to raise Rs. 20 lakhs to Finance a new project.

Required:
What are the ex-right price of shares and the value of a right, if
(i) The firm offers one right share for every two shares held.
(ii) The firm offers one right share for every four shares held.
(iii) How does the shareholders' wealth change from (i) to (ii)? How does right issue increases shareholders' wealth? (8 marks)

## Question 3:

(a) Classic Finance, a Leasing Company, has been approached by a prospective customer intending to aquire a machine whose cash down price is Rs. 6 crores. The customer, in order to leverage his tax position , has requested a quote for a three year lease with rent payable at the end of each year but in a diminishing manner such that they are in the ratio of 3:2:1. Depreciation can be assumed to be on WDV basis at $25 \%$ and Classic Finance's marginal tax rate is $35 \%$. The target rate of return for Classic Finance on the transaction is $10 \%$.You are required to calculate the lease rents to be quoted for the lease for three years. (8 marks)
(b) Trupti Co. Ltd. Promoted by a Multinational group "INTERNATIONALINC" is listed on stock exchange holding 84\% i.e. 63 lakhs shares.

Profit after Tax is Rs.4.80 Cr.
Free Float Market Capitalization is Rs.19.20 Cr.
As per the SEBI guidelines promoters have to restrict their holding to $75 \%$ to avoid delisting from the stock exchange. Board of Directors has decided not to delist the share but to comply with the SEBI guidelines by issuing Bonus shares to minority shareholders while maintaining the same $\mathrm{P} / \mathrm{E}$ ratio.

## Calculate:

(i) $\mathrm{P} / E$ Ratio
(ii) Bonus Ratio
(iii) Market price of share before and after the issue of bonus shares
(iv) Free Float Market capitalization of the company after the bonus shares. (8 Marks)

## Question 4:

The May fair Rubber Industry Ltd. (MRIL) manufactures small rubber components for the local market .It Is presently using 8 machines which were acquired 3 years ago at a cost of Rs. 18 lakh each having a useful life of 8 years with no salvage value . The policy of the company is to depreciate all machines in 5 years . Their production capacities 37 lakh units while the annual demand is 30 lakh units. The MRIL has received an order forma leading auto mobile company of Singapore for the supply of 20 lakh rubber bushes at Rs. 15 per unit .The existing machines can be sold @ Rs . 12 lakh per machine. It is estimated that the removal cost of each machine would be Rs.60,000. In order to meet the increased demand, the MRIL can acquire 3 new machines at an estimated cost of Rs. 100 lakh each which will have a combined production capacity of 52 lakh units.

The operating parameters of the existing machines are as follows:
(i) Labour requirements (Unskilled-18; Skilled-18; Supervisor-3; and Maintenance-2) and their per month salaries are Rs. 3,500; Rs. 5,500 ; Rs. 6,500 and Rs. 5,000 each respectively with an increase of 10 percent to adjust inflation.
(ii) Raw materials cost, inclusive of a stage is 60 percent of revenues.
(iii) Maintenance cost- years1-5 (Rs.22.5lakh), and years 6-8 (Rs.67.5lakh).
(iv) Operating expenses-Rs.52.10lakh expected to increase annually by 5 percent.
(v) Insurance cost/premium - year 1,2 per cent of the original cost of the machine, afterwards discounted by 10 percent.
(vi) Selling Price - Rs. 15 perunit.

The projected operating parameters with the replacement by the new machines are as follows:
(i) Additional working capital - Rs.50lakh.
(ii) Savings in cost of utilities-Rs.2.5lakh.
(iii) Maintenance cost -years1-2 (Rs.7.5lakh); years3.5 (Rs.37.5lakh).
(iv) Raw materials cost -55 per cent of sales.
(v) Employee requirement ( 6 skilled at monthly salary of Rs.7,000 each and one for maintenance at monthly salary of Rs.6,500).
(vi) Laying off cost of 34 workers - (Unskilled-18; Skilled-12; Supervisors-3; and maintenance-1) Rs. $9,21,000$, that is equivalent six months salary.
(vii) Insurance cost / premium -2 percent of the Purchase cost of machine in the first year and discounted by 10 percent in subsequent years.
(viii) Life of machines-5 years and salvage value -Rs. 10lakh per machine.

The company follows straight line method of depreciation and the same is accepted for tax purposes. Corporate tax rate is 35 per cent and the cost of capital is 20 percent.
As the Finance Manager of MRIL, prepare are port for submission to the top management with your recommendations about the financial viability of the replacement of the existing machine.
(16 Marks)

## Question 5:

(a) The following 2-way quotes appear in the foreign exchange market:

$$
\text { Spot } \quad 2 \text {-months forward }
$$

RS/US\$
Rs.46.00/Rs. 46.25
Rs.47.00/Rs. 47.50
Required:
(i) How many US dollars should a firm sell to get Rs. 25 lakhs after2 months?
(ii) How many Rupees is the firm required to pay to obtain US\$ $2,00,000$ in the spot market?
(iii) Assume the firm has US $\$ 69,000$ in current account earning no interest. ROI on Rupee investment is $10 \%$ p.a. Should the firm encash the US \$ now or 2 months later?
(8 marks)
(b) Eagle Ltd. reported a profit of Rs. 77 lakhs after 30\% tax for the financial year 2011-12. An analysis of the accounts revealed that the income included extraordinary items of Rs.8lakhs and an extraordinary loss of Rs. 10 lakhs. The existing operations, except for the extraordinary items, are expected to continue in the future . In addition , the result so the launch of a new product are expected to be as follows:

|  | Rs. in lakhs |
| :---: | ---: |
| Sales | 70 |
| Material costs | 20 |
| Labour costs | 12 |
| Fixed costs | 10 |

You are required to:
I. Calculate the value of the business, given that the capitalization rate is $14 \%$.
II. Determine the market price per equity share, with Eagle Ltd.'s share capital being comprised of 1,00,000 13\% preference shares of Rs. 100 each and 50,00,000 equity shares of Rs. 10 each and the P/E ratio being 10 times. ( 8 marks)

## Question 6:

(a) Gibralater Limited has imported 5000 bottles of shampoo at landed cost in Mumbai, of US $\$$ 20 each. The company has the choice for paying for the goods immediately or in 3 months time. It has a clean overdraft limited where $14 \%$ p.a. rate of interest is charged.
Calculate which of the following method would be cheaper to Gibralter Limited.
Pay in 3 months time with interest @ 10\% and cover risk forward for 3 months.
Settle now at a current spot rate and pay interest of the overdraft for 3 months. The rates are as follow:

Mumbai Rs./\$ spot : 60.25-60.55
3 months swap : 35/25
(8 marks)
(b) $A B C$ Co .is considering a new sales strategy that will be valid for the next 4 years. They want to know the value of the new strategy .Following information relating to the year which has just ended, is available:

| Income Statement | , |
| :---: | :---: |
| Sales | 20,000 |
| Gross margin (20\%) | 4,000 |
| Administration, Selling \& distribution expense (10\%) | 2,000 |
| PBT | 6000 |
| Tax (30\%) | 1,400 |
| PAT |  |
| Balance Sheet Information | 8,000 |
| Fixed Assets | 4,000 |
| Current Assets | 12,000 |
| Equity |  |

If it adopts the new strategy, sales will grow at the rate of $20 \%$ per year for three years . The gross margin ratio ,Assets turnover ratio ,the Capital structure and the income tax rate will remain unchanged.
Depreciation would be at $10 \%$ of net fixed assets at the beginning of the year.
The Company's target rate of return is $15 \%$.
Determine the incremental value due to adoption of the strategy. (8 marks)

## Question 7:

Answer any four from the following- : (4 marks each)
(a) Explain briefly, how financial policy is linked to strategic management.
(b) Write a short note on 'Leading and lagging'.
(c) Write a short note on 'Nostro, Vostro and Loro Accounts'.
(d) What is reverse merger?
(e) Mention the various techniques used in economic analysis.

