Seat No. : $\qquad$

## LA-107

April-2014
Fourth Year MBA (KS) (Integrated)
Financial Management
Time : 3 Hours]
[Max. Marks : 70

1. (a) 'Wealth maximization is the objective of the financial management.' - Considering the statement, show how the financing, investment and dividend decisions of a company can help to attain this objective.
(b) Assume that you are having a choice between incurring an immediate outlet of ₹ 1 lakh and having to pay ₹ 23,100 a year for 5 years [ $1^{\text {st }}$ payment due 1 year from now], the discount rate is $11 \%$. What would be your choice? Will your answer change if ₹ 23,100 is paid in the beginning of each year?

## OR

1. (a) Indian financial system comprises of four elements. Discuss.
(b) Mr. T is planning for his retirement. He is 45 years old today and would like to have ₹ 15 lakhs when he attains the age of 60 . He intends to deposits a constant amount of money at $12 \%$ each year in the public provident fund to achieve his objectives. How much money should he invest at the end of each year for the next 15 years, to obtain the required amount at the end of that period?
2. NI Corporation is contemplating replacement of an old machine by a new machine. The old machine bought a few years ago has a book value of ₹ $12,00,000$ and it can be sold to realise a post tax salvage value of Rs, $8,00,000$. It has a remaining life of four years after which its net salvage value is expected to be ₹ $5,00,000$. It is being depreciated annually at a rate of ₹ $1,75,000$. The working capital associated with this machine is ₹ $7,00,000$.

The new machine costs ₹ $50,00,000$. It is expected to fetch a net salvage value of $₹ 25,00,000$ after four years. The depreciation is to be charged as per the SLM. The new machine is expected to bring a saving of ₹ $8,00,000$ annually in manufacturing costs (other than depreciation).The incremental working capital associated with the new machine is ₹ $2,00,000$. The tax rate applicable to the firm is 40 percent. Advise the company about the replacement of the machine assuming cost of capital to be $15 \%$.

## OR

2. A project involving an outlay of $₹ 15$ million has the following benefits associated with it :

## [₹ Million]

Year 1 Year 2 Year 3

| Cash Flow | Prob. | Cash Flow | Prob. | Cash Flow | Prob. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 0.3 | 6 | 0.5 | 5 | 0.4 |
| 8 | 0.5 | 8 | 0.2 | 7 | 0.3 |
| 9 | 0.2 | 10 | 0.3 | 9 | 0.3 |

Assume that the cash flows are independent. Calculate the expected net present value and the standard deviation of net present value assuming discount rate of 12 percent.
3. (a) Vimal Corporation has the following book value capital structure :

Equity capital ( 30 million shares, ₹ 10 par)
Preference capital, 15 percent ( $10,00,000$ shares, ₹ 100 par)
Retained earnings
Debentures 11 percent ( $25,00,000$ debentures, ₹ 100 par)
Term loans, 13 percent
₹ 300 million
₹ 100 million
₹ 100 million
₹ 250 million
₹ 300 million
₹ 1050 million

The next expected dividend per share is ₹ 4.00 . The dividend per share is expected to grow at the rate of 15 percent. The market price per share is ₹ 80 . Preference stock, redeemable after 6 years, is currently selling for ₹ 110 per share. Debentures, redeemable after 6 years, are selling for ₹ 102 per debenture. The tax rate for the company is 35 percent.
Calculate the average cost of capital using
(i) Book value proportions, and
(ii) Market value proportions
(b) Explain various leverages and their computation.

OR
3. (a) Two firms M and N , belong to an equivalent risk class and identical in all respects except that firm M has $8 \%$ debt and firm N has no debt. The following is the relevant information available with regard to two firms.

| Particulars | Firm M (₹) | Firm N (₹) |
| :--- | ---: | :---: |
| EBIT | $50,00,000$ | $50,00,000$ |
| Less: Interest on debt | $8,00,000$ | - |
| Earnings to equity holders | $42,00,000$ | $50,00,000$ |
| Cost of equity | $12.5 \%$ | $15 \%$ |
| Market value of equity | $3,36,00,000$ | $3,33,33,333$ |
| Value of Debt | $1,00,00,000$ |  |

Ms. F owns 2 percent equity shares of M. Show the arbitrage process and the amount by which she could reduce her outlay through the use of personnel leverage and her increase in income by investing the total funds available.
(b) Discuss equity as a source of long term finance.
4. (a) Prepare an estimate of net working capital requirement for the Star Ltd. adding 10\% for contingencies from the information given below :
Estimated cost per unit of production ₹ 170 includes raw materials ₹ 80, direct labour ₹ 30 and overheads (exclusive of depreciation) ₹ 60 . Selling price ₹ 200 per unit.

Level of activity per annum
Raw materials in stock
Work in progress (assume 50\% completion stage)
Finished goods in stock
Credit allowed by suppliers
Credit allowed to debtors
Lag in payment of wages

1,04,000 units
4 weeks
2 weeks
3 weeks
2 weeks
5 weeks
1.5 weeks

Cash at bank is expected to be ₹ 52,000 .
You may assume that production is carried on evenly throughout the year ( 52 weeks) and wages and overheads accrue similarly. All sales are on credit basis only. You may state your assumption, if any.
(b) Sun Ltd. has an estimated cash payments of ₹ $16,00,000$ for a month period and the payments are expected to steady over the period. The fixed cost per transaction is $₹ 125$ and the interest rate on marketable securities is $12 \%$ p.a. Calculate the optimum transaction size.

## OR

4. F Ltd. deals with consumer durables, having an annual turnover of ₹ 80 lakhs, $75 \%$ of which are credit sales effected through a large number of dealers while the balance sales are made through showrooms on cash basis. Normal credit allowed is 30 days. The company proposes to expand its business substantially and there is good demand as well. However, the marketing manager finds that the dealer have difficulty in holding more stocks due to financial problem. He, therefore, proposes a change in the credit policy as follows :

| Proposal | Credit period | Anticipated credit sales <br> (₹ Lakhs) |
| :---: | :---: | :---: |
| I | 60 days | 70 |
| II | 90 days | 75 |

The products yield an average contribution of $25 \%$ on sales. Fixed costs amount to ₹ 5 lakhs per annum. The company expects a pre-tax return of $20 \%$ on capital employed. The provision for bad debts is to be increased from the current $1 \%$ to $1.5 \%$ for proposal-I and to $2 \%$ for proposal-II. Evaluate the new proposals and recommend the best policy.
5. Answer any Two from $\mathrm{a}, \mathrm{b}$ and c :
(a) From the following information, determine the theoretical market value of equity shares of a company as per Walter's Model:

| Earnings of the company | ₹ 50 lakhs |
| :--- | :--- |
| Dividend pay our ratio | $60 \%$ |
| Number of shares outstanding | 10 lakhs |
| Rate of return on investment | $15 \%$ |
| Price-earning ratio | 8 |

(b) Companies P and Q are valued as follows :

|  | P | Q |
| :--- | :--- | :--- |
| Earnings per share | $₹ 12.00$ | $₹ 4.00$ |
| Price per share | $₹ 110.00$ | $₹ 28.00$ |
| Number of shares | 60,000 | 21,000 |

$P$ acquires $Q$ by offering one shares of $P$ for every three shares of $Q$. If there is no economic gain from the merger, what is the price-earnings ratio of P's stock after the merger? What will be your answer if there is economic gain of $10 \%$ from the merger ?
(c) Explain in context of foreign exchange market: Bid rate, Ask rate, Spread, Direct quote, Indirect quote, Cross rate, Forward rate.

