# K.J. Somaiya Institute of Management Studies \& Research Course: MHRDM II Semester Sub: Financial Management 

Time: 3 Hours
Marks: 50
Note: 1) Attempt any five questions

## 2) All questions carry ten marks each

## 3) You may use interest factor tables and scientific calculator

1. A company is considering, purchase of new machinery which costs Rs $8,00,000$ and which has an estimated life of 10 years. This machine will generate additional sales of Rs $4,00,000$ per year, while increased cost of maintenance will be Rs $1,00,000$ per year. The cost of machine is depreciated on a straight line and has no salvage value at the end of its 10 year life. The company has a cost of capital of $12 \%$ and a corporate tax rate of $40 \%$. You are required to calculate:
i. Annual cash flow
ii. Net present value
iii. Payback period
iv. Profitability Index.

Should the company purchase the new machine?
2. The costs of specific sources of capital for Elegant Paper Ltd are as follow-

Cost of debt - 9\%
Cost of preferences - $14 \%$
Cost of equity - $\quad 17 \%$
The capital structure of Elegant Paper Ltd is as follows-

| Source of capital | Book value (Rs in million) | Market Value (Rs in million) |
| :--- | :---: | :---: |
| Equity | 50 | 100 |
| Preference | 10 | 9 |
| Debt | 80 | 75 |

Calculate the weight average cost of capital (WACC) for the Elegant papers using book value weights and market value weights.
3. XYZ Co provides the following information about the elements of cost-

Material $40 \%$
Labour 20\%
Overheads 20\%
The following further information is available-

- It is proposed to maintain a level of activity of 200000 units.
- Selling price Rs 12 per unit
- Raw materials are expected to remain in store for an average period of one month.
- Material will be in process on an average for half a month
- Finished goods are required to be in stock for an average period of one month
- Credit allowed to debtors is two months
- Credit allowed by suppliers is one month.

You are required to prepare a statement of working capital requirements, if the desired cash balance is Rs 200000.
4. (a) Chetan Corporation requires 2000 units of a certain item per year. The purchase price per unit is Rs 30 , the carrying cost of inventory is $25 \%$ of the inventory value and the fixed cost per order is Rs 1000.
(i) Determine the economic order quantity
(ii) What will be the total cost of carrying and ordering inventories when 4 orders of equal size are placed?
Marks)
(b) There are two options available to an investor. The first scheme (A) promises to pay Rs.1,50,000 at the end of 10 years if an investment of Rs. 10,000 is made annually. The second scheme (B) promises to pay Rs.1,50,000 at the end of 8 years if Rs. 15,000 is invested annually. Which of the two schemes is better for the investor?
5. a) Explain as to how the wealth maximization objective is superior to the profit maximization objective.
b) Explain the important functions of financial management.
6. A project costs Rs 25 lakh and is expected to generate following cash flows (Rs in lakh) at the end of each year for next 5 years-

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Cash <br> Inflow(Rs) | 8 | 8 | 7 | 7 | 6 |

If the opportunity cost of capital is $12 \%$, determine the NPV of the project using
present value table. Should the project be accepted?
7. Following information is forecasted by the CS Ltd for the year ending 2016-

|  | Balance as at <br> $1^{\text {st }}$ April 2016 | Balance as at 31 st <br> March 2017 |
| :--- | :---: | :---: |
| Raw materials | 45000 | 65356 |
| Work in progress | 35000 | 51300 |
| Finished goods | 60181 | 70175 |
| Debtors | 112123 | 135000 |
| Creditors | 50079 | 70469 |
| Purchase of raw materials (all <br> credit) |  | 400000 |
| Cost of production |  | 750000 |
| Cost of goods sold |  | 915000 |
| Operating cost |  | 950000 |
| Sales (all credit) |  | 1100000 |

You may take one year as equal to 365 days. You are required to calculate-
a) Net operating cycle period
b) Number of operating cycle in a year
c) Amount of working capital requirement
8. Write short notes on any two-
a. Shareholders value creation
b. Decisions of Financial Management
c. Long term sources of finance
d. How to finance Working capital

Or
Assuming a discount rate of $15 \%$, find out which one of the following gives the highest returns:-
a) Rs 1,60,000 available today
b) Rs 1,75,00 to be received after 8 years
c) Rs 25000 p.a. in perpetuity
d) Rs 10,000 per month for a year and Rs 1,00,000 at the end of the year
e) Rs 25,000 per year for the next 10 years.

