

## P.E.S. College of Engineering, Mandya - 571401 <br> (An Autonomous Institution affiliated to VTU, Belgaum) Second Semester - Master of Business Administration (MBA) Semester End Examination; June - 2016 <br> Financial Management

Time: 3 hrs
Max. Marks: 100
Note: i) Answer any FOUR full questions from PART - A and PART - B is compulsory.
ii) Scientific Calculations and PV/FV tables to be allowed.

## PART - A

1 a . Comment on the emerging role of finance manager in India.
b. Explain in detail the functions performed by the financial system.

## OR

2 a . What is the rationale of financial intermediaries?
b. Critically evaluate the goal of Maximization of Profit and Maximization of Return on Equity.

3 a. i) If you invest Rs. 5000 today at a compound interest 9 percent what will be its future value after 75 years?
ii) If the interest rate is $12 \%$, What are the doubling periods as per the rule 72 and the rule 69 respectively?
b. What is the present value of the following cash stream if the discount rate is 14 percent?

| Year | 0 | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cash flow | 5000 | 6000 | 8000 | 9000 | 8000 |
| OR |  |  |  |  |  |

4 a. Shyam barrows Rs. 80,000 for a musical system at a monthly interest of 1.25 percent. The loan is to be repaid in 12 equal monthly installments, payable at the end of each month. Prepare the loan ammortisation schedule.
b. I) Calculate the present value of Rs. 600 (i) Received one year from now, (ii) Received at the end of five years, (iii) Received at the end of fifteen years. Assume a 5 percent time preference rate.
II) Determine the present value of Rs. 700 each paid at the end of each of the next six years. Assume an 8 percent of interest.
III) Assuming a 10 percent discount rate, compute the present value of Rs. 1100, Rs. 900, Rs. 1,500 and Rs. 700 received at the end of one through four years.
[For calculations, use the PV tables.]

5 a. What are the advantages and disadvantages of preference share capital?
b. The servex company has the following capital structure on 30 June 2004.

|  | (Rs 0.00$)$ |
| :--- | :---: |
| Ordinary shares $(2,00,000$ shares) | 4000 |
| $10 \%$ preference shares | 1000 |
| $14 \%$ Debentures | 3000 |
|  | 8000 |

The share of the company sells for Rs. 20. It is expected that company will pay next year a dividend of Rs. 2 per share which will grow at 7 percent forever. Assume a 50 percent tax rate.

You are required to :
i) Compute a weighted average cost of capital based on the existing capital structure.
ii) Compute the new weighted average cost of capital if the company raises an additional Rs. 2000,000 debt by issuing 15 percent debentures. This would result in increasing the expected dividend to Rs. 3 and leave the growth rate unchanged, but the price of share will fall to Rs. 15 per share.

## OR

6 a. Discuss the factors affecting the Weighted Average Cost of Capital.
b. Amit Electronics is evaluating an expansions project that is expected to cost Rs. 20 million and generate an annual after tax cash flow of Rs. 4 million for the next 10 years. The tax rate for the company is 35 percent.

Amit Electronics has a target debt-equity ratio 1:1. Its cost of equity is 16.9 percent whereas its pre-tax cost of debt is 14 percent. The flotation cost of equity is 12 percent whereas the floatation cost of debt 2 percent. What is the NPV of the expansion project?

7 a. What are the implications of additively property of NPV? And what are its limitations?
b. The expected cash flow of the project are as follows :

| Year | Cash flow |
| :---: | :---: |
| 0 | -100000 |
| 1 | 20000 |
| 2 | 30000 |
| 3 | 40000 |
| 4 | 50000 |
| 5 | 30000 |

The cost of capital is 12 percent. Calculate the following :
i) Net present value
ii) Benefit - cost ratio
iii) Internal rate of return
iv) Modified internal rate of return
v) payback period
vi) discounted payback period.

## OR

8 a. A proforma cost sheet of a company provides the following data :

| Particulars | Rs. |
| :--- | :--- |
| Cost (per unit): |  |
| Raw Materials | 52.0 |
| Direct Labour | 19.5 |
| Overheads | 39.0 |
| Total Cost (per unit) | 110.5 |
| Profit | 19.5 |
| Selling price | 130.0 |

Additional information :
i) Average raw material in stock : One month
ii) Average materials in process : Half a month
iii) Credit allowed by suppliers : One month
iv) Credit allowed to debtors : Two month
v) Time lag in payment of wages: One and a half weeks
vi) Overheads: One month
vii) One fourth of sales are on cash basis
viii) Cash balance is expected to be Rs. 120000

You are required to prepare a statement showing the working capital needed to finance a level of activity of 70,000 units of output. You may assume that production is carried on evenly throughout the year and wages and overheads accrue similarly.
b. The relevant financial information for Horizon Limited for the year ended $20 \times 1$ is given below.

Profit and loss A/c Data Rs (million)
Sales 80
Cost of goods sold 56

| Balance sheet Data | Beginning $20 \times 1$ | End $20 \times 1$ |
| :--- | :---: | :---: |
| Inventory | 9 | 12 |
| Account receivables | 12 | 16 |
| Accounts payables | 7 | 10 |

What is the length of the operating cycle? The cash cycle? Assume 365 days to a year.

## PART - B

## 9. Case Study: (Compulsory)

A company is considering the following investment projects

|  | Cash flows (Rs) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Project | $\mathrm{C}_{0}$ | $\mathrm{C}_{1}$ | $\mathrm{C}_{2}$ | $\mathrm{C}_{3}$ |
| A | -10000 | $+10,000$ | - | - |
| B | -10000 | +7500 | +7500 | - |
| C | -10000 | +2000 | +4000 | +12000 |
| C | -10000 | +10000 | +3000 | +3000 |

a) Rank the project according to each of the following methods,
i) Payback
ii) $A R R$
iii) IRR
iv) NPV assuming discount rates of 10 and 30 percent.
b) Assuming the projects are independent, which one should be accepted? If the projects are mutually exclusive, which project is the best?

