Reg. No. | | | | | | | | | |

# Paper CM 554 A

## Fourth Semester M.Com. Degree Examination, May 2013
## COMMERCE
## Optional : Financial Management and Investment Science (FMAIS)
## Capital Structure Management

Time : 3 Hours  Max. Marks : 80

SECTION – A

**Note** : a) Answer **any four** questions.
b) **Each** question carries **ten** marks.
c) Answer to **each** theory question should **not** exceed **4** pages. **(4×10=40)**

1. What basic principles will you advocate in the matter of deciding on a proper pattern of capital structure for a company ? Explain the impact of financial leverage.

2. What is weighted average cost of capital ? Examine the rationale behind the weighted average cost of capital.

3. Explain relevance of time value of money in investment decision.

4. What do you mean by Risk-adjusted Discount Rate Approach ? How does it differ from Certainty Equivalent Approach Method ?

5. The shares of a company are currently selling at Rs. 240 per share. The company is proposing to issue new equity shares. The historical pattern of dividends paid during the last five years is given below :

| Year | Dividend (Rs.) |
|---|---|
| 1 | 20.50 |
| 2 | 22.14 |
| 3 | 23.91 |
| 4 | 25.82 |
| 5 | 27.89 |

P.T.O.

The costs of floatation are expected to be 4 per cent of the current selling price of the shares. You are required to determine.

i) Growth rate in dividends

ii) Cost of equity capital, assuming that the growth rate determined in (i) above will continue indefinitely

iii) Cost of new equity shares.

6. Summer Ltd. and Winter Ltd. are identical in all respects including risk factors except debt/equity mix. Summer Ltd. having issued 12% debentures of Rs. 30 lakhs, while Winter Ltd. issued only equity capital. Both the companies earn 24% before interest and tax on their total assets of Rs. 50 lakhs. Assuming the corporate effective tax rate of 40% and capitalization rate of 18% for an all-equity company, compute the value of Summer Ltd. and Winter Ltd. using

i) Net Income approach and

ii) Net Operating Income approach.

7. The share capital of a company is Rs. 10,00,000 with share face value of Rs. 10. The company has debt capital of Rs. 6,00,000 at 10% rate of interest. The sales of the firm are 3,00,000 units per annum at a selling price of Rs. 5 per unit and the variable cost is Rs. 3 per unit. The fixed costs amounts to Rs. 2,00,000. The company pays tax at 35%. If the sales increase by 10%, calculate

i) Percentage increase in EPS.

ii) Degree of operating leverage at the two levels and

iii) Degree of financial leverage at the two levels.

## SECTION – B

**Note** : a) Answer **any two** questions.

b) **Each** question carries **20** marks.

c) Answer to **each** theory question should **not** exceed **8** pages. **(2x20=40)**

8. "The total value of a firm remains unchanged regardless of variations in its financial mix". Discuss this statement and point out the role of arbitraging and home-made leverage.

9. A company is considering a proposal to purchase new equipment. The equipment would involve a cash outlay of Rs. 5,00,000 and working capital of Rs. 60,000. The expected life of the project is 5 years without any salvage value. Assume

that the company is allowed to charge depreciation on straight line basis for income-tax purpose. The estimated before tax cash inflows (earnings before depreciation and tax) are given below :

| **Year** : | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **Before-tax cash inflows** : | 1,80,000 | 2,20,000 | 1,90,000 | 1,70,000 | 1,40,000 |

The applicable income-tax rate to the company is 35%. The opportunity cost of capital the company is 10%.

You are required to calculate,

i) Payback period

ii) Discounted payback

iii) NPV

iv) Internal rate of return

v) Profitability index.

10. A company is considering two mutually exclusive projects X and Y. Project X costs Rs. 30,000 and Project Y Rs. 36,000. You are given below the net present value probability distribution for each project.

| **Project X** | | **Project Y** | |
|---|---|---|---|
| NPV Estimate (Rs.) | Probability | NPV Estimate (Rs.) | Probability |
| 3,000 | 0.1 | 3,000 | 0.2 |
| 6,000 | 0.4 | 6,000 | 0.3 |
| 12,000 | 0.4 | 12,000 | 0.3 |
| 15,000 | 0.1 | 15,000 | 0.2 |

i) Compute the expected net present value of projects X and Y.

ii) Compute the risk attached to each project i.e., standard deviation of each probability distribution.

iii) Which project do you consider more risky and why ?

iv) Compute the profitability index of each project.