

# I Semester M.Com. Degree Examination, February 2019 (CBCS Scheme) Commerce

## Paper - 1.5: ADVANCED FINANCIAL MANAGEMENT

Time: 3 Hours Max. Marks: 70

Instruction: Answer all Sections.

#### SECTION - A

1. Answer any seven questions. Each question carries 2 marks.

 $(7 \times 2 = 14)$ 

- a) What is arbitrage from the view point of capital structure theory?
- b) How profitability index is superior to net present value method?
- c) What is sensitivity analysis?
- d) Distinguish between merger and acquisition.
- e) What is a commodity derivative?
- f) What is meant by Pecking order theory of capital structure?
- g) Give the situations suitable for the use of modified IRR.
- h) What is meant by risk from the view point of capital budgeting?
- i) ABC Corporation stock is currently trading at Rs. 500 per share and its earnings per share for the year is Rs. 50. Calculate ABC's P/E ratio. How do you express the results?
- j) Distinguish between futures and forwards.

#### SECTION - B

Answer any four questions. Each question carries 5 marks.

 $(4 \times 5 = 20)$ 

- 2. "There are various motives behind corporate mergers and acquisitions". Elucidate.
- 3. Examine the validity of the assumptions of MM Hypothesis in capital structure.
- 4. Briefly explain the types of options with suitable examples.
- 5. A Trader buys a Canadian dollar futures contract at a price of INR 40. The contract size is CAD 1 million. If the spot rate for the CAD at the date of settlement is CAD/INR 41, what is the gain or loss on this contract to the trader?

P.T.O.



6. Green Way Ltd. employs certainty-equivalent approach in the evaluation of risky investments. The finance department of the company has developed the following information regarding a new project :

Year	Expected CFAT (Rs.)	Certainty-equivalent quotient
0	(2,00,000)	1.0
1	1,60,000	0.8
2	1,40,000	0.7
3	1,30,000	0.6
4	1,20,000	0.4
5	80,000	0.3

The firm's cost of equity capital is 18 per cent; its cost of debt is 9 per cent and the riskless rate of interest in the market on the treasury bonds is 6 per cent. Should the project be accepted?

7. Determine NPV of the project with the following information:

Initial Outlay of project

: Rs. 80,000

Annual revenues (Without Inflation) : Rs. 60,000

Annual costs excluding depreciation (Without inflation): Rs. 20,000

Useful life

4 years

Salvage value

Nil

Tax Rate

: 50%

Cost of Capital (Including Inflation premium of 10%): 12%

SECTION - C

Answer any three questions. Each question carries 12 marks.

 $(3 \times 12 = 36)$ 

8. From the following particulars, ascertain which project is more risky on the basis of standard deviation:

Project X		Project Y	
Cash Inflow (₹)	Probability	Cash Inflow (₹)	Probability
2,500	0.2	2,800	0.1
4,800	0.3	4,500	0.4
7,000	0.3	6,300	0.4
8,200	0.2	8,400	0.1



9. Shiva Limited is planning its capital investment programme for next year. It has five projects all of which give a positive NPV at the company cut-off rate of 15 percent, the investment outflows and present values being as follows:

Droinet	Investment	NPV at 15%	
Project	Rs. 000	Rs. 000	
Α	(50)	15.4	
В	(40)	18.7	
С	(25)	10.1	
D	(30)	11.2	
E	(35)	19.3	

The company is limited to a capital spending of Rs. 1,20,000.

You are required to optimise the returns from a package of projects within the capital spending limit. The projects are independent of each other and are divisible (i.e., part-project is possible).

10. Pigeon 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. 8 lakhs 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 results of 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 Pigeon 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/F ratio being 10 times.



11. Gems Ltd. has just installed Machine – X at a cost of Rs. 2,00,000. The machine has a five year life with no residual value. The annual volume of production is estimated at 1,50,000 units, which can be sold at Rs. 6 per unit. Annual operating costs are estimated at Rs. 2,00,000 (excluding depreciation) at this output level. Fixed costs are estimated at Rs. 3 per unit for the same level of production.

Gems Ltd. has just come across another model called Machine – Y capable of giving the same output at an annual operating cost of Rs. 1,80,000 (exclusive of depreciation). There will be no change in fixed costs. Capital cost of this machine is Rs. 2,50,000 and the estimated life is for five years will nil residual value.

The company has an offer for sale of Machine - X at Rs. 1,00,000. But, the cost of dismantling and removal will amount to Rs. 30,000. As the company has not yet commenced operations, it wants to sell Machine - X and purchase Machine - Y.

Gems Ltd. will be a zero-tax company for seven years in view of several incentives and allowances available. The cost of capital may be assumed at 15%.

You are required.

- i) Advise whether the company should opt for the replacement.
- ii) Will there be any change in your view, if Machine R has not been installed but the company is in the process of selecting one or the other machine? Support your view with necessary workings.

### 12. Write a note on:

- i) Hedging with example
- ii) Scenario analysis
- iii) Decision Tree analysis.