# M. COM DEGREE END SEMESTER EXAMINATION - OCT 2020 : FEBRUARY 2021 <br> SEMESTER 1 : COMMERCE <br> COURSE : 16P1COMT03 : FINANCIAL MANAGEMENT PRINCIPLES <br> (For Regular - 2020 Admission and Supplementary - 2016/2017/2018/2019 Admissions) 

Time : Three Hours

Max. Marks: 75
PART A
Answer any 10 (2 marks each)

1. What is Financial engineering?
2. What is financial forecasting?
3. What is Growth approach?
4. What do you mean by Marginal cost of Capital?
5. What is EP ratio?
6. Compare and contrast Debenture and Bond.
7. What is unsystematic risk?
8. What do you meant by Traditional theory?
9. What do you meant by Leveraged firm?
10. Compare and contrast Over capitalisation and Under capitalisation
11. What do you meant by Capital Budgeting?
12. What is Operating Risk?

## PART B

## Answer any 5 (5 marks each)

13. "Profit maximisation approach is not operationally feasible". Discuss.
14. The following details are provided by the LPG Limited

|  | Rs. |
| :--- | :---: |
| Equity share capital | $65,00,000$ |
| $12 \%$ Preference share capital | $12,00,000$ |
| $15 \%$ Redeemable debentures | $20,00,000$ |
| $10 \%$ Convertible debentures | $8,00,000$ |

The cost of equity capital for the company is $16.30 \%$ and income tax rate for the company is $30 \%$. You are required to calculate WACC of the company.
15. Dell Ltd has Rs. 100 preference shares, redeemable at a premium of $10 \%$ with 15 years maturity. The coupon rate is $12 \%$, floatation cost is $5 \%$. Sales price is Rs. 95 . Calculate cost of Preference shares.
16. Southern enterprises is in all equity firm and furnishes the following information.

Expected EBIT - Rs. 10 Lakhs.
Interest rate in the market - 6\%
Equity capitalisation rate (No debt is used) - 10\%
Assuming perfect capital market conditions and the firm raises a debt of Rs. 75 Lakhs, find out:
a. Value of the firm
b. Value of equity
c. Leveraged cost of equity
17. State the essentials of MM theory.
18. The average cash flow expected from a project is Rs. 2,00,000 per month. The standard deviation of cash flow has been estimated at Rs. 12,000. Another project of the same capital outlay has an expected cash flow of Rs. 3,00,000 per month with a standard deviation of Rs. 25,000. Compute the co-efficient of variation and comment on the acceptability of the projects.
19. Calculate the Degree of Operating Leverage, Degree of Financial Leverage and the Degree of Combined Leverage for the following firms and interpret the results.

| Firm | P | Q | R |
| :--- | :---: | :---: | :---: |
| 1. Output | $3,00,000$ | 75,000 | $5,00,000$ |
| 2. Fixed costs ( $₹$ ) | $3,50,000$ | $7,00,000$ | 75,000 |
| 3. Unit variable costs ( $₹$ ) | 1.00 | 7.50 | 0.10 |
| 4. Interest expenses ( $₹$ ) | 25,000 | 40,000 | - |
| 5. Unit selling price ( $₹$ ) | 3.00 | 25.00 | 0.50 |

20. XYZ Ltd had the following balance sheet for the year ended 31st December 1997

| Liabilities (Rs.in lakhs) |  | Assets (Rs. in lakhs) |  |
| :--- | :--- | :--- | :--- |
| Equity <br> each) | 10 | Fapital (one lakh shares of Rs.10 |  |
| Fixed Assets (Net) | 25 |  |  |
| Reserves and Surplus | 2 | Current Assets | 15 |
| $15 \%$ Debentures | 20 |  |  |
| Current Liabilities | 8 |  |  |
|  | 40 |  | 40 |

Additional information given-
Fixed cost per annum (excluding interest)- Rs. 8 lakhs
Variable operating cost ratio- 80\%
Total asset turnover-3
Income tax-50\%
Required- EPS, Operating leverage, Financial leverage, Combined leverage and Current ratio.
( $5 \times 5=25$ )

## PART C

Answer any 3 (10 marks each)
21. Three companies $A, B$ and $C$ are in the same type of business and hence have similar operating risks. However, the capital structure of each of them is different and the following are the details:

|  | A | B | C |
| :--- | :--- | :--- | :--- |
| Equity share capital (Face value Rs.10 per <br> share) | $4,00,000$ | $2,50,000$ | $5,00,000$ |
| Market value per share | 15 | 20 | 12 |
| Dividend per share | 2.70 | 4 | 2.88 |
| Debenture (face value per debenture Rs.100) | Nil | $1,00,000$ | $2,50,000$ |
| Market value per debenture | - | 125 | 80 |
| Interest rate | - | $10 \%$ | $8 \%$ |

Assume that the current levels of dividends are generally expected to continue indefinitely and the income tax rate at $50 \%$. You are required to compute the weighted average cost of capital of each company.
22. Critically appraise the Traditional theory and $M M$ thoery to the problem of capital structure.
23. S Ltd has Rs. 10,00,000 allocated for capital budgeting purposes. The following proposals and associated profitability indexes have been determined:

| Project | Amount (Rs.) | Profitability Index |
| :--- | :--- | :--- |
| 1 | $3,00,000$ | 1.22 |
| 2 | $1,50,000$ | 0.95 |
| 3 | $3,50,000$ | 1.20 |
| 4 | $4,50,000$ | 1.18 |
| 5 | $2,00,000$ | 1.20 |
| 6 | $4,00,000$ | 1.05 |

Which of the above investments should be undertaken? Assume that projects are indivisible and there is no alternative use of the money allocated for capital budgeting.
24. X Ltd is considering to purchase a new crusher unit for its immediate expansion programme. There are three machines suitable for the purpose. Their details are as follows:

| Particulars | Machines |  |  |
| :--- | :---: | :---: | :---: |
|  | A | B | C |
| Capital cost | $8,00,000$ | $9,00,000$ | $10,00,000$ |
| Expected annual sales | $6,00,000$ | $6,00,000$ | $6,00,000$ |
| Net cost of production | 40,000 | 50,000 | 40,000 |
| Direct material | 50,000 | 30,000 | 30,000 |
| Direct Labour | 60,000 | 50,000 | 40,000 |
| Power and water | 40,000 | 40,000 | 40,000 |
| Administration costs | 10,000 | 10,000 | 10,000 |
| Selling and distribution costs | 5 years | 6 years | 7 years |
| Life of the machine | $1,00,000$ | $1,50,000$ | 90,000 |
| Scrap value of machine |  |  |  |

Tax to be paid is expected at $30 \%$ of the net earnings of each year. Interest on capital has to be paid at $10 \%$ p.a.
You are requested to show which machine would be the most profitable investment based on the principle of payback.
25. Calculate operating leverage and financial leverage under situation 1 and 2 and financial plans
$A$ and $B$ respectively from the following information relating to the operation and capital
structure of a company. What are the combinations of operating and financial leverage which give highest and least .

Installed capacity
Annual production and sales
Selling price per unit
Variable cost per unit
Fixed cost:
Situation 1 :
Rs. 4,000
Situation 2 :
Rs. 5,000

Capital structure:

| Financial Plan |  |  |
| :--- | :---: | :---: |
|  | A (Rs.) | B (Rs.) |
| Equity | 5,000 | 15,000 |
| Debt (cost 10\%) | 15,000 | 5,000 |
|  | 20,000 | 20,000 |

