# M. COM DEGREE END SEMESTER EXAMINATION- NOVEMBER 2017 <br> SEMESTER 1 : COMMERCE <br> COURSE : 16P1COMT03 ; FINANCIAL MANAGEMENT PRINCIPLES <br> (Common for Regular - 2017 / Supplementary - 2016 Admissions) 

Time : Three Hours
Max. Marks: 75

## Section A <br> Answer any 10 (2 marks each)

1. Define Finance.
2. What do you mean by Wealth maximisation?
3. What is opportunity cost?
4. Compare and contrast Specific cost and Composite cost.
5. What do you mean by floating rate of debt?
6. Y Ltd retains ₹ $7,50,000$ out of its current earnings. The expected rate of return to the shareholders, if they had invested the funds elsewhere is $10 \%$. The brokerage is $3 \%$ and the shareholders come in $30 \%$ tax brackets. Calculate cost of retained earnings.
7. What is meant by Optimum capital structure?
8. What do you mean by Capitalisation?
9. What is systematic risk?
10. What is financial structure?
11. What do you mean by Decision tree?
12. How will you compute degree of operating leverage?

## Section B <br> Answer any 5 ( 5 marks each)

13. (a) Mr. Vishnu makes an initial deposit of $₹ 50,000$ with SBI. Interest is compounded at $10 \%$ p.a. for six years. Compute the amount on maturity.
(b) Mr. Rahul enters into an agreement to deposit ₹ 25,000 p.a. for four years to a financier who will allow 8\% interest p.a. and repay the amount at the end of four years. What amount will Rahul receives at maturity?
14. The capital structure of $A B C$ Ltd is equit capital ₹ 5 lakh, Reserve and surplus ₹ 2 lakh and Debenture ₹ 3 lakh. The cost of capital before tax are
a. Equity $\quad-18 \%$
b. Debentures -10\%

You are required to compute the WACC assuming a tax rate of $35 \%$
15. What is weighted average cost of capital? How is it computed?
16. The following data relates to four Four firms:-

| Firm | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| EBIT in ₹ | $2,00,000$ | $3,00,000$ | $5,00,000$ | $6,00,000$ |
| Interest in ₹ | 20,000 | 60,000 | $2,00,000$ | $2,40,000$ |
| Equity capitalisation rate | $12 \%$ | $16 \%$ | $15 \%$ | $18 \%$ |

Assuming that there are no taxes and rate of debt is $10 \%$, determine the value of each firm using the Net Income approach. Also determine the overall cost of capital of each firm. What happens if Firm A borrows ₹ 2 Lakhs at $10 \%$ to repay equity capital?
17. Compare and constrast NO theory and NI theory.
18. Explain the relevance of Time value of Money in financial decisions.
19. The following figures relate to two companies. You are required to:-

1. Compute the Operating, Financial and Combined Leverages for the two companies and
2. Comment on their relative risk positon.

| Particulars | P Ltd (in ₹ Lakhs) | Q Ltd (in ₹ Lakhs) |
| :--- | :---: | :---: |
| Sales | 500 | 1000 |
| Variable cost | 200 | 300 |
| Fixed cost | 150 | 400 |
| Interest | 50 | 100 |

20. 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 | $\mathbf{Q}$ |
| :---: | :---: | :---: |
| $\mathbf{Q}$ | $\mathbf{R}$ |  |
| 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 |
| 4. Interest expenses ( $₹$ ) | 25,000 | 40,000 |
| 5. Unit selling price ( $₹$ ) | 3.00 | 25.00 |

## Section C

Answer any 3 (10 marks each)
21. From the following information, compute WACC of SG Ltd. (Assume Tax $=35 \%$ )

- Debt to Total Funds:
- Preference Capital to Equity Capital:
- Preference Dividend Rate
- Interest on Debenture:
- EBIT at 30\% of Capital employed:
- Cost of Equity Capital is

2:5
1:1
15\%
₹ 20,000 for half year
₹ 3,00,000
24\%
22. The net operating income of Mahim Ltd is ₹ $6,00,000$. The company has issued $12 \%$ debentures of ₹ $5,00,000$. The overall capitalisation rate has been estimated at $15 \%$.
(a) Compute the value of the firm and equity capitalisation rate under NOI approach.
(b) Find out the value of the firm and equity capitalisation rate if:

1. The company makes further isssue of $12 \%$ debentures of ₹ $2,00,000$
2. The company redeems half of its existing debentures.
3. A company is planning to purchase a machine. Two models are available A and B. Machine A cost ₹ $2,00,000$. Machine B costs ₹ $3,50,000$. The annual cash inflow due to installation of the machine has worked out as follows:

| Year | Machine A <br> Cash Inflow | Machine B <br> Cash inflow |
| :---: | :---: | :---: |
| 1 | 40,000 | 65,000 |
| 2 | 40,000 | 60,000 |
| 3 | 40,000 | 55,000 |
| 4 | 30,000 | 50,000 |
| 5 | 30,000 | 45,000 |
| 6 | 30,000 | 30,000 |
| 7 | 20,000 | 30,000 |
| 8 | 20,000 | 20,000 |
| 9 | 10,000 | 20,000 |
| 10 | 10,000 | 20,000 |

Using payback period method, determine which machine should be purchased?
24. Briefly explain the different methods of ranking investment proposal.
25. From the following, prepare income statement of Company $\mathrm{A}, \mathrm{B}$ and C .

|  | Company A | Company B | Company C |
| :--- | :---: | :---: | :---: |
| Financial leverage | $3: 1$ | $4: 1$ | $2: 1$ |
| Interest | $₹ 200$ | $₹ 300$ | $₹ 1000$ |
| Operating Leverage | $4: 1$ | $5: 1$ | $3: 1$ |
| Variable cost as \% age of sales | $66 \frac{2}{3} \%$ | $75 \%$ | $50 \%$ |
| Income tax rate | $45 \%$ | $45 \%$ | $45 \%$ |

