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

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

1. What is meant by Annuity Discounting factor?
2. What is perpetual Debt?
3. What do you meant by WACC?
4. What is Specific cost of capital? Give two examples.
5. What is real cost of debt?
6. What is average cost of capital?
7. What is meant by Optimum capital structure?
8. Define Capital structure.
9. What is MM theory?
10. What is Capital gearing?
11. What is investment decision?
12. What are the differences between fixed and variable costs?

## Section B Answer any 5 (5 marks each)

13. On the 20th birthday of the daughter, Mr. Rajive offered to pay ₹ $1,00,000$ on her $25^{\text {th }}$ birthday.
a) If he decides to make annual payments into a $8 \%$, what amount should he invest each year?
b) If he decides to invest a lumpsum, after one year on annually compounding basis for the purpose, how much should he invest?
c) If in case (a) the payments are made in the beginning of the year, how much will be annuity?
14. The capital structure of $A B C$ Ltd is equity capital ₹ 5 lakh, Reserve and surplus ₹ 2 lakh and Debenture ₹ 3 lakh. The cost of capital before tax are
a) Equity
b) Debentures

You are required to compute the WACC assuming a tax rate of $35 \%$
15. EEE Ltd has a uniform income that accrues in a four year business cycle. It has an average EPS of ₹ 25 (per share of ₹ 100) over its business cycle. Your are required to find out: -
a) Cost of Equity Capital if Market Price in Year 1 is ₹ 150
b) Expected Market Price in Year 2 if cost of Equity is expected to rise to $18 \%$
c) EPS in Year 2 if the company were to have an expected market price of ₹ 160 per share, at the existing cost of equity.
16. Explain the major considerations in Capital structure planning.
17. 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?
18. What are the various types of Capital investment decisions?
19. A firm sells its only product at Rs. 10 per unit. Its variable cost ratio is $70 \%$ while fixed costs are Rs. 1,000. Present sales are 1000 units. Required:-
a)Find out:-
(a) DOL; (b) EBIT if sales increases by $40 \%$;
(c) EBIT if sales falls by $25 \%$
b)By what \% should sales fall before the firm starts incurring losses?
20. The data of two firms Rama and Krishna, having the same PV ratio, is given below. Make relevant computations and comment on their operating risks.

| Particulars | Rama | Krishna |
| :--- | :---: | :---: |
| Sales | $2,00,000$ | $2,00,000$ |
| Variable cost | $1,20,000$ | $1,20,000$ |
| Fixed cost | 30,000 | 50,000 |

## Section C <br> Answer any 3 ( 10 marks each)

21. From the following information, compute WACC of SG Ltd. (Assume Tax $=35 \%$ )

- Debt to Total Funds: $\quad$ 2:5
- Preference Capital to Equity Capital:

1:1

- Preference Dividend Rate
- Interest on Debenture:

15\%

- EBIT at $30 \%$ of Capital employed:
₹ 20,000 for half year
- Cost of Equity Capital is
₹ $3,00,000$
24\%

22. Alpha company is contemplating conversion of $500,14 \%$ convertible bonds of Rs. 1000 each. The market price of the bond is Rs.1.080. The bond indenture provides that one bond will be exchanged for 10 shares. Price earning ratio before redemption is $20: 1$ and anticipating price earning ratio after redemption is $25: 1$. The number of shares outstanding prior to redemption are 10,000 . EBIT amounts to Rs.2,00,000. The company is in the $35 \%$ tax bracket..Should the company convert the bond into shares? Give reasons.
23. Explain the techniques of evaluating a project's finanacial viability.
24. Ram Ltd. whose cost of capital is $10 \%$ is considering two mutually exclusive projects $X$ and $Y$, the details of which are:

|  | Year | Project X (Rs.) | Project Y (Rs.) |
| :--- | :---: | :---: | :---: |
| Cost | 0 | 70,000 | 70,000 |
| Cash inflows | 1 | 10,000 | 50,000 |
|  | 2 | 20,000 | 40,000 |
|  | 3 | 30,000 | 20,000 |
|  | 4 | 45,000 | 10,000 |
|  | 5 | 60,000 | 10,000 |

You are required to compute:
a. The Net present value at $10 \%$
b. Profitability index
c. Internal rate of return for

Project X by using $27 \%$ and $28 \%$ and for Project $Y$ using $36 \%$ and $38 \%$.

| Year | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| PVF @ 10\% | 0.909 | 0.826 | 0.751 | 0.683 | 0.621 |
| PVF @ 27\% | 0.787 | 0.620 | 0.481 | 0.384 | 0.303 |
| PVF @ 28\% | 0.781 | 0.610 | 0.477 | 0.373 | 0.291 |
| PVF @ 36\% | 0.735 | 0.541 | 0.398 | 0.292 | 0.215 |
| PVF @ 38\% | 0.725 | 0.525 | 0.381 | 0.275 | 0.201 |

25. ABC Ltd needs Rs. 10,00,000 for expansion. The expansion is expected to yield an annual EBIT of Rs. 1,60,000. In choosing a financial plan, ABC Ltd has an objective of maximising earnings per share. It is considering the possibility of issuing equity shares and raising debt of Rs. $1,00,000$ or Rs. $4,00,000$ or Rs. $6,00,000$. The current market price per share is Rs. 25 and is expected to drop to Rs. 20 if the funds are borrowed in excess of Rs. 5,00,000.
Funds can be borrowed at the rates indicated below:
(a) Upto Rs. 1,00,000 at $8 \%$
(b) Over Rs. 1,00,000 upto Rs. 5,00,000 at 12\%
(c) Over Rs. 5,00,000 at $18 \%$

Assume a tax rate of 50\%. Determine the EPS for the three financing alternatives and suggest the scheme which would meet the objective of the management.

