

[Time: 2 ½ Hours]

[ Marks:75]

- NB:** 1. All questions are compulsory  
2. Figures to the right indicate full marks

**Q.1.a) Choose the correct alternative from the given options ( Any 8/10 ) (8 Marks)**

1. Debentures is a \_\_\_\_\_ securities.
  - a) Ownership
  - b) Creditorship
  - c) Government
  - d) Short term
2. \_\_\_\_\_ weights use accounting values to measure the proportion of each type of capital in the firm's financial structure.
  - a) Book value
  - b) Market value
  - c) Par value
  - d) Revised value
3. Which of the following has an Implicit cost of capital
  - a) Equity share capital
  - b) Preference share capital
  - c) Retained earnings
  - d) Debentures
4. The cost of \_\_\_\_\_ capital is the highest.
  - a) Equity
  - b) Debt
  - c) International
  - d) Preference
5. Present value of Rs 1 discounted @ 12% for '0' years is \_\_\_\_\_
  - a) Zero
  - b) 1
  - c) 0.89
  - d) 1.2
6. Cost of Capital for Government securities is also known as
  - a) Risk-free Rate of Interest
  - b) Maximum rate of return
  - c) Risky Investment
  - d) Risky rate of return
7. Wealth maximization as the goal of the firm implies enhancing the wealth of
  - a) The Board of Directors
  - b) The firm's employees
  - c) The firm's stockholders
  - d) The Lead Managers

8. Which of the following is not an element of financial management?
  - a) Allocation of resources
  - b) Financial planning
  - c) Corporate social responsibility
  - d) Wealth maximization
9. Calculate the present value of Rs 1000 to be received at the end of 8 years. Assume an interest rate of 7%
  - a) Rs 582
  - b) Rs 1718.19
  - c) Rs 649.37
  - d) Rs 541.23
10. Cost of Capital for Bonds and Debentures is calculated on
  - a) Before Tax basis
  - b) After Tax basis
  - c) Risk free rate of Interest basis
  - d) Fluctuating rate of Interest basis

**Q.1.b) State whether the following statements are True or False (Any 7/10) (7 Marks)**

1. Time value of money signifies that the value of a unit of money remains unchanged during different time periods.
2. If I make one deposit today and wish to know how much it will accumulate to in the future, that value is called future value annuity.
3. Cost of debt and Cost of Preference share capital, both require tax adjustment.
4. WACC is the overall cost of capital of the firm.
5. Equal installments at equal intervals will result in an annuity.
6. At the point of IRR; NPV is positive.
7. If  $NPV \geq 0$ , then project is acceptable otherwise project has to be rejected.
8. Equity investors are high risk bearers.
9. At optimal capital structure, the cost of capital is the least.
10. Cash credit can be availed only by debit card holder.

**Q.2A.** A firm decided to make a deposit of Rs.20,000 at the end of each year, for the next 10 years at 10% rate of interest. What will be the total cumulative deposit at the end of 10th year from today? **(8 Marks)**

**Q.2 B.** Calculate the present value of annuity of Rs 10,000 received annually for five years when discounting factor is 10% **(7 Marks)**

**OR**

**Q.2 C.** Ms.Maha deposits in a bank Rs. 8, 00,000 for 4 years at 10% rate of interest. What will be the future value after 4 years, if the investment is compounded: **(8 Marks)**

- i. Semi-annually
- ii. Quarterly

**Q.2 D.** Raji has invested Rs 25,000 in a scheme @ 12% p.a. compounded quarterly. Find out what will be the amount at the end of the 2<sup>nd</sup> year. **(7 Marks)**

**Q.3** Vijay Ltd. has the following capital structure as on 31<sup>st</sup> March 2022 **(15 Marks)**

Particulars	Rs
10% Debentures	3,00,000
9% Preference Shares	2,00,000
Equity Shares of Rs 100 each	5,00,000
Total	10,00,000

The equity shares of the company are quoted at Rs 102 and the company is expected to declare a dividend of Rs 9 per share for the year.

Required:

- Assuming the tax rate applicable to the company to be 50%, calculate the cost of capital.
- Assuming that the company can raise additional term loan at 12% for Rs 5,00,000 to finance an expansion, calculate the revised weighted average cost of capital. The company's assessment is that it will be in a position to increase the dividend from Rs 9 per share to Rs 10 per share, but the business risk associated with new financing may bring down the market price from Rs 102 to Rs 96 per share.

**OR**

**Q.3 A.** PQR Ltd. has the following capital structure on 31-3-2014: **(8 Marks)**

Particulars	Rs
Equity shares capital (2,00,000 shares of Rs 10 each)	20,00,000
Reserves & Surplus	20,00,000
12% Preference shares	10,00,000
9% Debentures	30,00,000
	<b>80,00,000</b>

The market price of equity share is Rs 30. It is expected that the company will pay next year a dividend of Rs 3 per share, which will grow at 7% forever. Assume 40% income tax rate. You are required to compute weighted average cost of capital using book value weights.

**Q.3 B.** Calculate the weighted average cost of capital from the following details of Nectar Jewel Co. Ltd. **(7 Marks)**

Particulars	Rs in lakhs
Equity Capital	400
Reserves & Surplus	200
12% Preference shares	100
13% Debentures	800

The required after – tax rate of return on equity is 18%, Reserves & surplus is 15%. The tax rate is 40%. What is the minimum amount of earnings the company has to earn in order to maintain the market value of its shares?

**Q.4 A.** Consider two mutually exclusive projects A and B with the following cash flow streams: **(8 Marks)**

Year	Cash flow (in '000 Rs.)	
	Project A	Project B
0	(200)	(200)
1	100	40
2	80	40
3	40	40
4	30	80
5	20	100
6	-	120

Calculate:

- Discounted Payback period Method
- Net present value Method

(Assume 10% p.a. cost of capital)

**Q.4 B.** A firm whose cost of capital is 10% is considering two mutually exclusive projects, M and N, the details of which are given below. **(7 Marks)**

Particulars	Cash flow (Rs. In lakhs)	
	Project M	Project N
Investment	70	70
Year 1	10	50
Year 2	20	40
Year 3	30	20
Year 4	45	10
Year 5	60	10

Compare the two alternatives on:

- Net present value basis
- Profitability Index

**OR**

**Q.4 C.** ABC Ltd. proposes to purchase a machine costing Rs. 1,50,000. The company estimates the following. **(8 Marks)**

Particulars	Y1	Y2	Y3	Y4	Y5
Sales	1,50,000	1,65,000	2,09,000	2,42,000	2,64,000
Variable cost	90,000	99,000	1,23,500	1,54,000	1,68,000
Fixed cost p.a. Excluding Depreciation	20,000	22,000	25,000	26,000	28,000

The machine was to be the only asset in the block with a depreciation rate of 20%. Evaluate the proposal to purchase the asset, using NPV method, assuming a DCF of 12%, the income tax rate being 30%

**Q.4 D.** The total available budget for the company is Rs 20 lacs. The projects have been ranked in the order of profitability. **(7 Marks)**

Project	Cost (Rs. In Lacs)	Profitability Index
M	6	1.5
N	5	1.25
O	7	1.20
P	2	1.15
Q	5	1.10
R	13	1.40

- a) Calculate
- Cash Inflow for each of the projects
  - Net Present value for each of the projects.
- b) Which projects should be undertaken by the company in order to maximise the Net Present Value under Capital Rationing assuming that each project is indivisible.

**Q.5 A.** Explain in brief the sources of long-term finance and short-term finance. **(8 Marks)**

**Q.5 B.** Explain in brief the objectives of financial management? **(7 Marks)**

**OR**

**Q.5 Write short notes on (any 3) (15 Marks)**

- Qualities of a finance manager
- Concept of Time value
- Factors influencing Capital budgeting
- Types of Capital rationing
- Commercial paper

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