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Second Semester MBA Degree Examination, July/August 2021
Financial Management

Time: 3 hrs. Max. Marks : 80

Note : 1. *Answer any Five full questions.*
2. *Use of P.V. Tables is permitted.*

1 a. Mr. Akash has opened PPF account and depositing Rs 4000 every year for 15 years at 8.1%. Find out the accumulated fund in his account. **(02 Marks)**

b. What is Wealth Maximization? How it is different from profit maximization? **(06 Marks)**

c. Sulabh Internation is evaluating a project whose expected cash flows are as follows :

Year	0	1	2	3	4	5
Cash flow	-10,00,000	1,00,000	2,00,000	3,00,000	6,00,000	3,00,000

What is the NPV of the project, if the discount rate is 12% for the year 1 and increases every year by 1%? **(08 Marks)**

2 a. Define Angel Investing. **(02 Marks)**

b. An investor deposits Rs 400 in a bank account for 6 years at 8% interest. Find out the amount which he will receive in his account if interest is compounded Annually, Semi – Annually and Quarterly. **(06 Marks)**

c. Estimate the working capital required for the project. Add 10% to the computed figures to allow contingencies.

Estimated cost per unit	Amount per unit
1. Raw material	Rs 80
2. Direct labour	Rs 30
3. Overhead	Rs 60
Total cost of production	Rs 170

Additional information :
* Selling price Rs 200 per unit.
* Level of capacity 1,04,000 units of production P.a.
* Raw materials in stock – Average 4 weeks.
* W.I.P (100% of raw material, 50% of conversion cost) – Average 2 weeks.
* Finished goods in stock – Average 4 weeks.
* Credit allowed by supplied – 4 weeks.
* Credit allowed to debtors – 8 weeks.
* Lag in payment of wages – Average 1.5 weeks.
* Cash at Bank – Rs 25,000.

Production is carried out evenly throughout the year. All sales are on credit basis. **(08 Marks)**

3 a. What do you mean by Permanent and Temporary working capital? **(02 Marks)**

b. What are factors which influencing working capital? **(06 Marks)**

c. Pentagon Ltd is evaluating a project that has the following cash flow stream associated with it.

Year	0	1	2	3	4	5	6
Cash flow (Rs. in millions)	-120	-80	20	60	80	100	120

The cost of capital for pentagon is 15%. Calculate MIRR. **(08 Marks)**

4 a. Calculate IRR for a project with initial investment of Rs 20,000 and provides annual cash flows of Rs 5430 for 6 years. **(02 Marks)**

b. Briefly explain the factors affecting dividend policy of a company. **(06 Marks)**

c. A Firm's after tax cost of capital of the specific sources is as follows :

i) Cost of debt - 8%.

ii) Cost of preference shares (Including dividend tax) - 14%.

iii) Cost of Equity funds - 17%.

The following is the capital structure.

Sl. No	Sources	Amount (in Rs)
1.	Debt	3,00,000
2.	Preference capital	2,00,000
3.	Equity capital	5,00,000

Calculate the weighted Average cost of capital using Book value and market value, if Debt market value is Rs 2,70,000, preference capital is Rs 2,30,000 and Equity capital is Rs 7,50,000. **(08 Marks)**

5 a. What is Behavioral Finance? **(02 Marks)**

b. M/s Tejasvini Ltd., needs Rs 10 lakh. For expansion is expected to yield 16% on investment (Before interest and the tax payment). Firm is planning to raise funds through debt and equity and the objective is to maximize the EPS. If the firm borrows in excess of Rs 4,00,000, the cost of debt would go up to 12% from 10% and the market price per share would drop from Rs 25 to Rs 20. The tax rate applicable is 50%. Determine EPS at three alternatives of Financing mix i) Rs 3,00,000 debt ii) Rs 5,00,000 debt iii) Rs 7,00,000 debt in the capital structure. **(06 Marks)**

c. The capital structure of the Progressive Ltd, consists of ordinary share capital of Rs 10,00,000 (share of Rs 100 each) and Rs 10,00,000 of 10% debenture. The selling price is Rs 10 per unit, variable costs amounts to Rs 6 per unit and fixed expenses amount to Rs 2,00,000. The income tax rate is assumed to be 50%. The sales level is expected to increase from 1,00,000 units to 1,20,000 units. You are required to calculate Financial and Operating leverage at (1,00,000 units and 1,20,000 units). **(08 Marks)**

6 a. What are the assumptions of CAPM model? **(02 Marks)**

b. From the following data, compute the duration of the operating cycle for each of the two years. Assume 360 days per year for computing purposes.

Particulars	Year – I (in Rs)	Year – II (in Rs)
Stocks :		
* Raw materials	20,000	27,000
* Work - in – progress	14,000	18,000
* Finished goods	21,000	24,000
Purchase of Raw materials	96,000	1,35,000
Cost of goods sold	1,40,000	1,80,000
Sales	1,60,000	2,00,000
Debtors	32,000	50,000
Creditors	16,000	18,000

(06 Marks)

c. A Firm's sale, Variable costs and Fixed costs amount to Rs 75,00,000, Rs 42,00,000 and Rs 6,00,000 respectively. It has borrowed Rs 45,00,000 at 9% and its equity capital total Rs 55,00,000.

i) What is the Firm's ROI?

ii) Does the Firm have favorable Financial leverage?

iii) If the Firm belongs to industry whose assets turnover is 3, does it have a high or low Asset leverage?
iv) What are the Operating , Financial and Combined leverages?
v) If the sales drop to Rs 50,00,000, what will be the new EBIT? **(08 Marks)**

7 a. What is Marginal Cost of Capital? **(02 Marks)**
b. Briefly explain the sources of Finance. **(06 Marks)**
c. As an Investment Manager, you are given the following information :

Investment in Equity shares of	Initial price	Dividend	Year – end Mkt price	Beta Risk Factor
A. Cement Ltd	Rs 25	Rs 2	Rs 50	0.80
Steel Ltd	Rs 35	Rs 2	Rs 60	0.70
Liquor Ltd	Rs 45	Rs 2	Rs 135	0.50
B. Govt. India Bonds	Rs 1,000	Rs 140	Rs 1,005	0.99

Risk free return is 8%. You are required to calculate
i) Expected rate of return of market portfolio.
ii) Expected return in each security using CAPM. **(08 Marks)**

8 A Company is currently considering modernization of a machine originally costing Rs 1,00,000 that has current book value of zero. However, it is in good working condition and can be sold for Rs 50,000. Two choices are available one is to rehabilitate the existing machine at a total cost of Rs 3,60,000 and the other is to replace the existing machine with a new machine costing Rs 4,20,000 and requiring Rs 60,000 to install. The rehabilitated machine as well as the new machine would have a six year life and no salvage value. The Firm's projected after tax profits under various alternatives are as follows :

Year	Expected after tax		
	Existing Machine	Rehabilitated Machine	Profits of New Machine
1	Rs 4,00,000	Rs 4,40,000	Rs 4,80,000
2	Rs 5,00,000	Rs 5,80,000	Rs 4,40,000
3	Rs 6,20,000	Rs 7,00,000	Rs 7,00,000
4	Rs 7,20,000	Rs 8,00,000	Rs 8,20,000
5	Rs 8,20,000	Rs 9,00,000	Rs 8,60,000
6	Rs 10,00,000	Rs 10,80,000	Rs 10,20,000

The Firm is taxed at 55% of income. The Company uses Straight line depreciation.
The company's cost of capital is 12%. Advise the Company, whether , it should rehabilitate the existing machine or replace it with a new machine by using Net Present Value Method. **(16 Marks)**

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