

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA-SEMESTER-I-EXAMINATION-WINTER-2024

Subject Code: MB01095031**Date: 18/01/2025****Subject Name: Financial Management****Time: 10:30 AM TO 01:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

		Marks
Q.1	Define the following terms. <ol style="list-style-type: none"> 1. Annuity 2. Yield to call 3. Flotation cost 4. Interim dividend 5. Capital rationing 6. Factoring 7. PVGO 	14
Q.2	(a) Discuss in detail the steps involved in a public issue. (b) Prepare the Loan amortisation schedule from the following information: Loan amount: Rs.15,00,000 Tenure of loan: 5 years Interest: 13% p.a. Repayment: 5 equal annual instalment first instalment beings at the end of the year 1. <p style="text-align: center;">OR</p> (b) A bond with a face value of Rs.1,000, an 8% coupon rate is currently selling for Rs.925. If the bond has 3 years remaining to maturity, what is its yield to maturity (YTM)?	7 7
Q.3	(a) Imperial Industries is currently at its target debt-equity ratio of 0.8 : 1. It is considering a proposal to expand capacity which is expected to cost Rs.600 million and generate after-tax cash flows of Rs.150 million per year for the next 10 years. The tax rate for the firm is 35 percent. Ganesh, the CFO of the company, has considered two financing options : (i) Issue of equity stock. The required return on the company's new equity is 25 percent and the issuance cost will be 10 percent. (ii) Issue of debentures at a yield of 14 percent. The issuance cost will be 2 percent. <ol style="list-style-type: none"> 1. Calculate the WACC for Imperial Industries. 2. Derive Imperial Industrie's weighted average flotation cost. 3. Calculate the NPV of the proposal after incorporating the flotation costs. (b) "Leverage is Double Edge Sword" Explain this with appropriate illustrations.	7 7
Q.3	(a) Explain the Net Operating Income (NOI) and Net Income (NI) approaches to capital structure theories briefly, along with a diagram. Also, comment on which approach is more rational or practical.	7

- (b) Madhu Corporation has the following book value capital structure: 7

Particulars	Amount (Rs. in million)
Equity Capital (30 million shares, Rs.10 par)	Rs. 300 million
Preference Capital, 15% (1,000,000 shares, Rs.100 par)	Rs. 100 million
Retained Earnings	Rs. 100 million
Debentures 11% (2,500,000 debentures, Rs.100 par)	Rs. 250 million
Term Loans, 13%	Rs. 300 million
Total	Rs.1050 million

The next expected dividend per share is Rs.4.00. The dividend per share is expected to grow at the rate of 15 percent. The market price per share is Rs.80. Preference stock, redeemable after 6 years, is currently selling for Rs.110 per share. Debentures, redeemable after 6 years, are selling for Rs.102 per debenture. The tax rate for the company is 35 percent.

Calculate the average cost of capital using market value approach.

- Q.4** (a) Explain the importance of cash management in a firm. Discuss the various techniques and approaches used for managing cash effectively. 7

- (b) The following information is available from Amrita Ltd. 7

Raw materials Rs 150
 Direct labour Rs. 80
 Overhead Rs. 50
 Profit Rs. 50

The following further particulars are available:

- Raw materials in stock, on average, 1 month.
- Materials in process: 0.5 month.
- Finished goods in stock, on average, 1.5 month.
- Credit allowed by suppliers is for 2 months.
- Credit allowed to debtors is 3 months.
- The average time-lag in payment of wages and overhead expenses is 1 month.
- 25% of the output is sold against cash; cash in hand and at the bank is desired to be maintained at Rs 100000.

You are required to prepare a statement showing the working capital requirements to finance a level of activity of 100000 units of production. (Take 12 months for the calculation purpose)

OR

- Q.4** (a) Anish Corporation currently provides 45 days of credit to its customers. Its present sales are Rs. 80 million. The firm's cost of capital is 13 percent and the ratio of variable costs to sales is 0.75. Anish is considering extending its credit period to 60 days. Such an extension is likely to push sales up by Rs 20 million. The bad debt proportion on additional sales would be 10 percent. The tax rate for Anish is 35 percent. Should the Anish Corporation adopt new policy? support your argument with necessary calculations. 7

- (b) You are the Financial Manager of a mid-sized manufacturing company, and you are faced with a situation where your company has a short-term cash shortage to meet day-to-day requirements. You need to arrange financing to cover this gap. What are the possible financing options you can explore, and what factors would you consider when selecting the appropriate financing option? 7

Q.5

Apexa Ltd is in the business of manufacturing automobile spare parts. The firm is considering two mutually exclusive technologies for the manufacture of hydraulic brakes, project X and Y. The cost of these technologies is Rs. 1500 lakh and Rs.1600 lakh respectively.

Depending upon various features of the product obtainable from these two technologies, the firm has developed a forecast of cash flows for five years; the life of each project. These cashflows are as below:

(Rs. in Lakh)

Year	Project X	Project Y
1	400	500
2	500	600
3	600	650
4	575	350
5	350	400

Project X is a familiar technology and therefore the firm feels that the current cost of capital of 12% is the appropriate discount rate. Whereas Project Y is considered riskier than option A and therefore the firm would like to use a discount rate of 15%.

- (a) Calculate the NPV for both the projects and advise which project company should opt for based on NPV decision criteria. 7
- (b) Calculate the payback period for both the projects and advise which project company should opt for based on payback decision criteria. 7

OR

- (a) Calculate the IRR for both the projects and advise which project company should opt for based on IRR decision criteria 7
- (b) What are the problems with IRR? Is there any method which is an improvement over IRR? If yes, explain the same. 7
