INTERMEDIATE EXAMINATION SET 2

MODEL QUESTION PAPER TERM – DECEMBER 2024

PAPER – 11 SYLLABUS-2022

FINANCIAL MANAGEMENT AND BUSINESS DATA ANALYTICS

Time Allowed: 3 Hours **Full Marks: 100**

The figures in the margin on the right side indicate full marks.

SECTION – A (Compulsory)

1. Choose the correct option: **[15 x 2 = 30]**

(i) Relationship between annual effective rate of interest and annual nominal rate of interest is, if frequency of compounding is more than 1,
(a) Effective Rate < Nominal rate
(b) Effective Rate > Nominal rate
(c) Effective Rate = Nominal rate
(d) none of the above

(ii) If the nominal rate of interest is 10 per cent per annum and frequency of compounding is 4 i.e. quarterly compounding, the effective rate of interest will be
(a) 10.25% per annum
(b) 10.38% per annum
(c) 10% per annum
(d) none of the above

(iii) Prime duty of a merchant banker is -
(a) Maintaining records of clients
(b) Giving loans to clients
(c) Working as a Capital Market Intermediary
(d) None of the above

(iv) Average collection period is 2 months, cash sales and average receivables are ₹ 5,00,000 and ₹6,50,000 respectively. The total sales amount would be-
(a) ₹40,00,000
(b) ₹42,00,000
(c) ₹44,00,000
(d) ₹48,50,000

(v) The degree of operating leverage and degree of financial leverage of Vintex Ltd. are 2.00 and 1.5 respectively. What will be the percentage change in EPS, if the sale increases by 10%?
(a) 10% increase
(b) 15% increase
(c) 30% increase
(d) 35% increase

(vi) If a company issues new share capital to redeem debentures, then:
(a) OL will increase
(b) FL will increase
(c) OL will decrease
(d) FL will decrease

(vii) Which of the following is not used in Capital Budgeting?
(a) Time Value of Money
(b) Sensitivity Analysis
(c) Net Assets Method
(d) Cash Flows

(viii) A project has a 10% discounted payback of 2 years with annual after-tax cash inflows commencing from year end 2 to 4 of ₹400 lakh. How much would have been the initial cash outlay which was fully made at the beginning of year 1?
(a) ₹ 400 lakh
(b) ₹ 422 lakh
(c) ₹ 452 lakh
(d) ₹ 497.20 lakh

(ix) Which of the following derivative is not traded on Indian Stock Market?
(a) Index Options
(b) Stock Futures
(c) Index Futures
(d) Forward Rate Agreements

(x) DuPont Analysis deals with:
(a) Analysis of Current Assets
(b) Analysis of Profit
(c) Capital Budgeting
(d) Analysis of Fixed Assets

(xi) Debt to Total Assets of a firm is 2. The Debt to Equity would be:
(a) 0.80
(b) 0.25
(c) 1.00
(d) 0.75

(xii) DPIIT stands for _______________.
(a) Department for Promotion of Industry and Internal Trade
(b) Department for Promotion of Industry and International Trade
(c) Department for Production of Industry and Internal Trade
(d) Department for Promotion of International and Internal Trade

(xiii) The descriptive data may be deciphered as:
(a) May be deciphered in the form of qualitative information
(b) May be deciphered in the form of quantitative information
(c) May be deciphered in the form of information from informal sources
(d) All of the above

(xiv) Binomial distribution applies to attributes:
(a) that are categorised into two mutually exclusive and exhaustive classes
(b) that are categorised into three mutually exclusive and exhaustive classes
(c) that are categorised into less than two mutually exclusive and exhaustive classes

(d) that are categorised into four mutually exclusive and exhaustive classes

(xv) Data represented in the form of picture is termed as:
(a) Qualitative data
(b) Quantitative data
(c) Graphic data
(d) All of the above

SECTION – B
(Answer any five questions out of seven questions given. Each question carries 14 Marks.)
[5x14=70]

2. (a) Describe the functions of Commercial Banks. **[7]**

(b) Describe descriptive analytics. Explain how does descriptive analytics work. **[7]**

3. (a) The following accounting information and financial ratios of Star Sunshine Ltd. relate to the year ended 31-03-2024:

(i) Accounting information:

Direct wages	10% of works cost
Stock of raw material	3 months' usage
Stock of finished goods	6% of works cost
Raw material consumed	20% of works cost
Debt collection period	60 days
Gross profit	15% of sales
Net profit	8% of sales
All sales are on credit	

(ii) Ratios

Fixed asset to sales	1:3
Fixed assets to current assets	13:11
Current ratios	2
Long term loan to current liability	2:1
Capital to reserve and surplus	1:4

If value of fixed assets as on 31-3-2024 amounted to ₹26 lakhs, prepare a balance sheet of the company for the year ended 31-3-2024. **[7]**

(b) VW Ltd. gives you the following information for the year ended 31st March, 2024:

(i) Sales for the year totalled ₹96,00,000. The company sells goods for cash only.
(ii) Cost of goods sold was 60% of sales. Closing inventory was higher than opening inventory by ₹20,000.

(iii) Tax paid amounted to ₹7,00,000. Other expenses totalled ₹21,45,000. Outstanding expenses on 31st March, 2023 and 31st March, 2024, totalled ₹82,000 and ₹91,000 respectively.

(iv) New machinery and furniture costing ₹10,50,000 in all were purchased. One equipment was sold for ₹20,000.

(v) A right issue was made of 50,000 shares of ₹10 each at a premium of ₹3 per share. The entire money was received with application.

(vi) Dividends totalling ₹4,00,000 were distributed among the shareholders.

(vii) Cash in hand and at Bank as at 31st March, 2023 and 31st March, 2024 totalled ₹2,10,000 and ₹4,14,000 respectively.

You are required to prepare cash flow statement as per CAS3 for the year ended 31st March, 2024 using the direct method. **[7]**

4. (a) The following are the income statements of A Limited for the years ended 31.03.2023 and 31.03.2024.

Particulars	31.03.23 (₹)	31.03.24 (₹)
Net Sales	1,70,000	1,90,400
Less: Cost of goods sold	1,05,000	1,20,000
Gross Profit (P)	65,000	70,400
Administrative expenses (A)	13,200	14,960
Selling expenses:		
Advertisement expenses	3,000	4,000
Other selling expenses	40,800	41,800
Total selling expenses (B)	43,800	45,800
Operating expenses (A + B)	57,000	60,760
Operating Profit (D) [D = P – (A + B)]	8,000	9,640
Other Incomes (E)	6,400	9,200
Other expenses (F)	6,800	4,800
Profit before tax (PBT) [PBT = D + E – F]	7,600	14,040
Income tax (T)	3,800	6,200
Profit after tax (PAT) [PAT = PBT – T]	3,800	7,840

Prepare a Comparative income statement and comment on the performance of A Limited.

[7]

(b) Calculate the WACC using the following data by using:

(i) Book value weights

(ii) Market value weights

The capital structure of the company is as under:

	(₹)
Debentures (₹100 per debenture)	5,00,000
Preference shares (₹100 per share)	5,00,000
Equity shares (₹10 per share)	10,00,000

Total	20,00,000

The market prices of these securities are:
Debentures: ₹ 105 per debenture
Preference shares: ₹ 110 per preference share
Equity shares: ₹ 24 each.

Additional information:
(1) ₹ 100 per debenture redeemable at par, 10% coupon rate, 4% floatation costs, 10 year maturity.
(2) ₹ 100 per preference share redeemable at par, 5% coupon rate, 2% floatation cost and 10 year maturity.
(3) Equity share has ₹ 4 floatation cost and market price ₹ 24 per share.

The next year expected dividend is ₹ 1 with annual growth of 5%. The firm has practice of paying all earnings in the form of dividend. Corporate tax rate is 50%. **[7]**

5. (a) A firm proposes to market a cheaper variety of its existing brand to be sold for ₹20 per unit, estimated product-life being five years. The sales volume for the five years has been estimated to be 30,000 units for the first year, 40,000 units for each of the next two years and 20,000 units for each of the last two years. The variable cost p.u. is ₹10. Production of the cheapest brand will entail an initial expenditure of ₹4,50,000 in purchasing and installing a new plant with estimated economic life of five years and scrap value of ₹50,000. The fixed cost of ₹2,00,000 per annum including depreciation on the plant on straight line basis will be needed for producing and marketing the cheaper brand. Introduction of this cheaper variety is also likely to have an adverse impact on the demand of the existing dearer brand resulting in loss of contribution estimated at ₹20,000 per annum.

Assuming cost of Capital to be 10% and marginal tax rate to be 40%, you are required to evaluate proposal and give your reasoned recommendation as to its acceptance or rejection. The PV factors at 10% for five years are 0.909, 0.826, 0.751, 0.683 and 0.62. **[7]**

(b) Electromatic Excellers Ltd. specialise in the manufacture of novel transistors. They have recently developed technology to design a new radio transistor capable of being used as an emergency lamp also. They are quite confident of selling all the 8,000 units that they would be making in a year. The capital equipment that would be required will cost ₹25 lakhs. It will have an economic life of 4 years and no significant terminal salvage value.

During each of the first four years' promotional expenses are planned as under:

	1	2	3	4
Advertisement	1,00,000	75,000	60,000	30,000
Others	50,000	75,000	90,000	1,20,000
Variable cost of production and selling expenses: ₹250 per unit				

Additional fixed operating costs incurred because of this new product are budgeted at ₹75,000 per year. The company's profit goals call for a discounted rate of return of 15% after taxes on investments on new products. The income tax rate on an average works out to 40%. You can assume that the straight line method of depreciation will be used for tax and reporting. Assess the initial selling price per unit of the product that may be fixed for obtaining the desired rate of return on investment. Present value of annuity of ₹1 received or paid in a steady stream throughout 4 years in the future at 15% is 3.0079. **[7]**

6. (a) A company plans to manufacture and sell 400 units of a domestic appliance per month at a price of ₹ 600 each. The ratio of costs to selling price is as follows:

Particulars	(% of selling price)
Raw materials	30%
Packing materials	10%
Direct labour	15%
Direct expense	5%

Fixed overheads are estimated at ₹4,32,000 per annum. The following norms are maintained for inventory management:

Raw materials	30 days
Packing materials	15 days
Finished goods	200 units
Work-in-progress	7 days

Other particulars are given below:

(A) Credit sales represent 80% of total sales and the dealers enjoy 30 working days' credit. Balance 20% is cash sales.

(B) Creditors allow 21 working days credit for payment.

(C) Lag in payment of overheads and expenses is 15 working days.

(D) Cash requirements to be 12% of net working capital.

(E) Working days in a year are taken as 300 for budgeting purpose.

Prepare a Working Capital requirement forecast for the budget year. **[7]**

(b) ABC Corporation is considering relaxing its present credit policy and is in the process of evaluating two proposed policies. Currently, the firm has annual credit sales of ₹ 50 lakhs and accounts receivable turnover ratio of 4 times a year. The current level of loss due to bad debts is ₹1,50,000. The firm is required to give a return of 25% on the investment in new accounts receivables. The company's variable costs are 70% of the selling price. Analyse the following given information and Examine which is the better option.

(Amount in ₹)

	Present Policy	Policy Option I	Policy option II
Annual credit sales	50,00,000	60,00,000	67,50,000
Accounts receivable turnover ratio	4 times	3 times	2.4 times
Bad debt losses	1,50,000	3,00,000	4,50,000

[7]

7. (a) A Company pays a dividend of ₹2.00 per share with a growth rate of 7%. The risk free rate is 9% and the market rate of return is 13%. The Company has a beta factor of 1.50. However, due to a decision of the Finance Manager, beta is likely to increase to 1.75. Calculate the present as well as the likely value of the share after the decision. **[7]**

(b) A firm's sales, variable costs and fixed cost amount to ₹75 lakhs, ₹42 lakhs and ₹6 lakhs respectively. It has borrowed ₹45 lakhs at 9% and its equity capital totals ₹55 lakhs.

Analyze the given information and calculate the following:

(i) The firm's ROI.

(ii) Does it have favorable financial leverage?

(iii) If the firm belongs to an industry whose asset turnover is 3, does it have high or low asset leverage?

(iv) The operating, financial and combined leverages of the firm.

(v) If the sales drop to ₹50 lakhs what will the new EBIT be?

(vi) At what level will the EBT of the firm equal to zero? **[7]**

8. (a) "Transformation of Data to Decision Relevant Information requires to go through certain core steps." In the light of the given statement, explain the steps to transform data into information. **[7]**

(b) Describe the steps to include data visualization in report design. **[7]**