MODEL QUESTION PAPER **SET - 2**

INTERMEDIATE **TERM – DECEMBER 2023**

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

1. Multiple Choice Questions: **[15 x 2 = 30]**

(i) Efficient portfolios are those portfolios, which offer ________________(for a given level of risk).
(a) Maximum return
(b) Minimum return
(c) Average return
(d) Positive return

(ii) Following is a widely used graph for Data Visualisation ___________________.
(a) Bar chart
(b) Pie chart
(c) Histogram
(d) All of the above

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

(iv) The primary benefit of data distribution is __________________________.
(a) the estimation of the probability of any certain observation within a sample space
(b) the estimation of the probability of any certain observation within a non-sample space
(c) the estimation of the probability of any certain observation within a population
(d) the estimation of the probability of any certain observation without a non-sample space

(v) What is the value of a levered firm L Ltd. if it has the same EBIT as an unlevered firm U Ltd., (with value of ₹ 700 lakh), has a debt of ₹200 lakh, tax rate is 35 % under M-M approach?
(a) ₹770 lakh
(b) ₹500 lakh
(c) ₹630 lakh
(d) ₹900 lakh

(vi) X Ltd. distributes its products to more than 500 retailers. The company's collection period is 30 days and keeps its inventory for 20 days. The operating cycle would be ______________________.
(a) 40 Days
(b) 43 Days
(c) 45 Days
(d) 50 Days

(vii) Higher FL is related the use of:
(a) Higher Equity
(b) Higher Debt
(c) Lower Debt
(d) Lower Equity

(viii) According to Gordon's Dividend Capitalisation Model, if the share price of a firm is ₹43, its dividend payout ratio is 60%, cost of equity is 9%, ROI is 12% and the number of shares are 12,000, what will be the net profit of the firm?
(a) ₹15,480
(b) ₹23,220
(c) ₹36,120
(d) ₹54,180

(ix) A sound Capital Budgeting technique is based on:
(a) Cash Flows
(b) Accounting Profit
(c) Interest Rate on Borrowings
(d) Last Dividend Paid.

(x) Which of the following is not true with reference capital budgeting?
(a) Capital budgeting is related to asset replacement decisions
(b) Cost of capital is equal to minimum required return
(c) Existing investment in a project is not treated as sunk cost
(d) Timing of cash flows is relevant.

(xi) Minimum rate of return that a firm must earn in order to satisfy its investors, is also known as:
(a) Average Return on Investment
(b) Weighted Average Cost of Capital
(c) Net Profit Ratio
(d) Average Cost of borrowing.

(xii) Short selling refers to _________________________.
(a) Buying shares and then selling them on the same day
(b) Selling shares without owning them
(c) Selling some shares out of a large holding
(d) Continuously selling shares in lots

(xiii) Net Profit Ratio Signifies:
(a) Operational Profitability
(b) Liquidity Position
(c) Big-term Solvency
(d) Profit for Lenders

(xiv) A firm has Capital of ₹10,00,000; Sales of ₹5,00,000; Gross Profit of ₹2,00,000 and Expenses of ₹1,00,000. What is the Net Profit Ratio?
(a) 20%
(b) 50%
(c) 10%
(d) 40%.

(xv) In Inventory Turnover calculation, what is taken in the numerator?
(a) Sales
(b) Cost of Goods Sold
(c) Opening Stock
(d) Closing Stock.

SECTION – B

(Answer any five questions out of seven questions given. Each question carries 14 Marks.)

2. **(a)** List the different types of Money Market Instruments. **[7]**

(b) Enumerate the benefits of data analytics. **[7]**

3. **(a)** From the following details, prepare statement of proprietary Funds with as many details as possible: **[7]**

a.	Stock velocity	6
b.	Capital Turnover ratio (on cost of sales)	2
c.	Fixed Assets Turnover ratio (on cost of sales)	4
d.	Debtors velocity	2 months
e.	Gross profit turnover ratio	20%
f.	Creditors velocity	73 days

The gross profit was ₹60,000. Reserves and surplus amounts to ₹20,000. Closing stock was ₹5,000 in excess of opening stock.

(b) Following information is available from the books of Standard Company Ltd. **[7]**

Particulars	2021 (₹)	2022 (₹)
Profit made during the year		2,50,000
Income received in advance	500	600
Prepaid expenses	1,600	1,400
Debtors	80,000	95,000
Bills Receivable	25,000	20,000
Creditors	45,000	40,000
Bills Payable	13,000	15,000
Outstanding expenses	2,500	2,000
Accrued Income	1,500	1,200

Calculate cash flow from operations.

4. **(a)** The following data relate to some important items of a company disclosing its development during the last five years: **[7]**

	2018 (₹)	2022 (₹)
Working Capital	2,33,53,010	3,82,50,955
Plant and Equipment	99,78,420	2,41,76,835
Long – Term Debts	72,80,000	1,40,00,000
Net Tangible Assets	2,80,80,230	4,98,76,090

Computing the trend ratios and evaluate the changes in the financial position (soundness / weakness) of the company.

(b) Calculate the weighted average cost of capital using (i) book value weights; and (ii) market value weights based on the following information: **[7]**

Book value structure:	₹
Debentures (₹100 per debenture)	8,00,000
Preference share (₹100 per share)	2,00,000
Equity shares (₹10 per share)	10,00,000
	20,00,000

Recent market prices of all these securities are:
Debentures: ₹110 per debenture;
Preference share: ₹120 per share; and
Equity shares: ₹22 per share
External financing opportunities are**:**

a. ₹100 per debenture redeemable at par, 10 year maturity, 13% coupon rate, 4% flotation cost and sale price ₹100;
b. ₹100 per preference share redeemable at par, 10 year maturity, 14% dividend rate, 5% flotation cost and sale price ₹100; and

Equity share – ₹2 per share flotation costs and sale price ₹22 Dividend expected on equity share at the end of the year is ₹2 per share; anticipated growth rate in dividend is 7%. Company pays all its earnings in the form of dividends. Corporate tax rate is 50%. **[7]**

5. (a) 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:

1st Year	**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]**

(b) Assume a business that is considering a given project. Below are some selected data from the discounted cash flow model created by the company's financial analysts:
A project requires an initial investment of ₹1,91,315 and is expected to generate the following net cash inflows:

Year 1 (2019): ₹95,000; Year 2 (2020): ₹80,000; Year 3 (2021): ₹60,000; Year 4 (2022): ₹55,000. Assess the discounted payback period of the project if the appropriate discount rate for this project is 12%. **[7]**

6. **(a)** Q Ltd sells goods at a uniform rate of gross profit of 20% on sales including depreciation as part of cost of production. Its annual figures are as under: **[7]**

	₹
Sales (at 2 months credit)	24,00,000
Materials consumed (suppliers credit 2 months)	6,00,000
Wages paid (Monthly at the beginning of the subsequent month)	4,80,000
Manufacturing expenses (cash expenses are paid – one month in arrear)	6,00,000
Administration expenses (cash expenses are paid – one month in arrear)	1,50,000
Sales promotion expenses (paid quarterly in advance)	75,000

The company keeps one month stock each of raw materials and finished goods. A minimum cash balance of ₹80,000 is always kept. The company wants to adopt a 10% safety margin in the maintenance of Working Capital.
The company has no work-in-progress

Compute the required Working Capital of the company on cash cost basis.

(b) X Ltd. buys its annual requirement of 36,000 units in six instalments. Each unit cost ₹1 and the ordering cost is ₹25. The inventory carrying cost is estimated at 20% of unit value. Find the total annual cost of the existing inventory policy. Examine how much money can be saved by using E.O.Q? **[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.
Determine 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 lakh, ₹42 lakh and ₹6 lakh respectively. It hasborrowed ₹45 lakh at 9% and its equity capital totals ₹55 lakh.

(i) Calculate 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) Compute the operating, financial and combined leverages of the firm.
(v) If the sales drop to ₹50 lakh what will the new EBIT be?
(vi) At what level will the EBT of the firm equal to zero? **[7]**

8. **(a)** "To make the data turn into user friendly information, it should go through six core steps" – discuss. **[7]**

(b) Discuss the data classification process and steps involved in it. **[7]**