INTERMEDIATE EXAMINATION

SET 1

MODEL QUESTION PAPER

TERM – JUNE 2023

PAPER - 11

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.

Where considered necessary, suitable assumptions may be made and clearly indicated in the answer.

Answer Question No. 1 and any five from Question No. 2, 3, 4, 5, 6, 7 and 8.

SECTION - A

1. (a) Choose the correct alternative **[1 × 12 = 12]**

(i) Which of the following is the main objective of financial management?

a. Revenue Maximisation

b. Profit Maximisation

c. Wealth Maximisation

d. Cost Minimisation

(ii) Which one of the following activities is outside the purview of financing decision in financial management?

a. Identification of the source of funds

b. Measurement of the cost of funds

c. Deciding on the time of raising the funds

d. Deciding on utilization of the funds

(iii) Which of the following forms of equity financing is especially designed for funding High Risk & High Reward projects?

a. ADR

b. GDR

c. FCCB

d. Venture Capital

(iv) A process through which loans and other receivables are underwritten and sold in a form of asset is known as:

a. Factoring

b. Forfeiting

c. Securitisation

d. Bill Discounting

(v) In Net Profit Ratio, the denominator is:

a. Net Sales

b. Cost of Sales

c. Cost of Goods Sold

d. All of the above

(vi) Which of the following does not change Current Ratio?

a. Issue of Debentures to buy machinery
b. Issue of Debentures to pay Creditors
c. Sale of Investment to pay Creditors
d. Avail Bank Overdraft to buy Machine

(vii) Which of the following statements is correct?

a. A higher Receivable Turnover is not desirable.
b. Interest Coverage Ratio depends upon Tax Rate.
c. Increase in Net Profit Ratio means increase in Sales.
d. Lower Debt-Equity Ratio means lower Financial Risk.

(viii) Which of the following is a Yield Ratio?

a. Proprietary Ratio
b. Debt-Equity Ratio
c. Price-Earnings Ratio
d. Fixed Asset Ratio

(ix) β (Beta) of a security measures its

a. Divisible Risk
b. Financial Risk
c. Market Risk
d. None of the above

(x) Numerical data may be expressed as

a. text
b. quantities
c. images
d. all of the above

(xi) Which of the following is not a data validation technique?

a. Code check
b. Range check
c. Length check
d. Consistency check

(xii) XBRL is the abbreviation of

a. eXtensible Business Reporting Language
b. eXtensive Business Reporting Language
c. eXtended Business Reporting Language
d. eXclusive Business Reporting Language

(b) State True or False **[1 × 7 = 7]**

(i) If the Profitability Index is more than one, the project should be accepted otherwise rejected.

(ii) As per Walter's Model of Dividend Policy the firm should retain its earnings if the rate on internal retention is higher than the capitalisation rate.

(iii) If a project's annual cash flows have positive and negative signs over the period, there will certainly be multiple internal rates of return

(iv) Gross Working Capital is the difference between total current assets and total current liabilities.

(v) Working Capital Turnover Ratio may be classified under Activity Ratio.

(vi) Capital budgeting decisions are reversible in nature.

(vii) Gantt charts represent a project's timeline or activity changes across time.

(c) Fill in the blanks **[1 × 6 = 6]**

(i) Generally, cost of retained earnings is same as cost of __________.

(ii) The discount rate used for determining NPV of a project under capital budgeting is at least the_________.

(iii) Modigliani-Miller theory states that ____________is independent of the firm's dividend policy.

(iv) Under NPV method, the discount rate used is _________.

(v) Baumol model takes into account all motives of holding ___________.

(vi) Data may be classified as Restricted, _____________ or Public by an entity.

SECTION - B

2. (a) How will you relate 'Profit Maximisation' and 'Wealth Maximisation' objectives of financial management?

(b) (i) Prepare a list of various the features of Treasury bills.

(ii) Demonstrate the features of hedge fund. **[5 + (5+5) = 15]**

3. (a) Using the following data, find as many items as possible to prepare the Balance Sheet as at the end of the year:

Gross profits	₹ 5,40,000
Shareholders' Funds	₹ 40,00,000
Gross Profit Margin	30%
Credit Sales to Total Sales	80%
Total Assets Turnover Ratio (based on Sales Value)	0.3 times
Inventory Turnover Ratio (Based on cost)	4 times
Average collection period (360 days in a year)	20 days
Current ratio	1.8
Long-term Debt to Equity	40%

(b) Identify whether the following items are inflows or outflows and place them under appropriate categories in the cash flow statement under Ind AS 7:

Item Description	Inflow	Outflow	Category
Normal income tax refund			
Proceeds of a share issue			
Interest received by a financial enterprise			
Decrease in debtors			
Dividend received by a manufacturing company			

[10 + 5 = 15]

4. (a) The WONDERLAND LTD. has the following Book Value Capital Structure as on March 31, 2022:

	(Amount in ₹ Thousand)
600000 Equity Share at ₹ 10 each fully paid	6,000
10000, 9% Preference Shares of ₹ 100 each	1,000
30000, 12% Debentures of ₹ 100 each	3,000
	10,000

The equity share of the Company sells at ₹ 20 per share. The dividend expected next year is ₹ 2.5 per share, which is expected to grow at 5% per annum. Corporate tax rate is 30%. You are required to determine the Weighted Average Cost of Capital (WACC) of Wonderland Ltd. based on the existing Capital Structure.

(b) "Biggest challenges lie in creating the efficiencies needed to gather and process basic financial data and continue to deliver traditional finance outputs while at the same time redeploying their limited resources to enable higher-value business decision support activities." List of the steps to be followed to transform raw data into user friendly information. **[8 + 7 = 15]**

5. (a) Suppose, PQR Ltd. which is expecting the EBIT of ₹1,50,000 per annum on an investment of ₹5,00,000, is considering the finalisation of the Capital Structure or the financial plan. The company has access to raise funds of varying amounts by issuing equity share capital, 12% preference share and 10% debenture or any combination thereof. Suppose, it analyses the following four options to raise the required funds of ₹5,00,000:

(i) By issuing equity share capital at par.

(ii) A total of 50% funds by equity share capital and 50% funds by preference shares.

(iii) A total of 50% funds by equity share capital, 25% by preference shares and 25% by issue of 10% debentures.

(iv) A total of 25% funds by equity share capital, 25% as preference share and 50% by the issue of 10% debentures.

Assuming that PQR Ltd. belongs to 50% tax bracket, analyse the four options based on EPS.

(b) 'In artificial intelligence, there are two schools of thought: data-driven and model-driven' – Critically explain this statement. Mention of real-life examples will carry weight. **[7 + 8 = 15]**

6. (a) ELROND LTD. (EL) has just installed MACHINE A at a cost of ₹ 2,00,000. This machine has 5 years life with no residual value. The annual volume of production is estimated at 150000 units, which can be sold at ₹ 8 per unit. Annual operating costs are estimated at ₹ 2,00,000 (excluding depreciation) at this output level. Fixed costs are estimated at ₹ 4,50,000 per annum for the same level of production. The company has just come across another model called MACHINE B capable of giving the same output at an annual operating costs of ₹ 1,50,000 (excluding depreciation). There will be no change in fixed costs. Capital cost of this machine is ₹ 2,50,000 and the estimated life is 5 years with no residual value. The company has an offer for sale of MACHINE A at ₹ 1,00,000. But the cost of dismantling and removal will amount to ₹ 30,000. As the company has not yet commenced

operation, it wants to sell MACHINE A and purchase MACHINE B. ELROND LTD. will be zero-tax company for 7 years in view of several incentives and allowances available. The cost of capital is 14%.

Required: Based on the NPV Criterion, advise the Company whether it should opt to replace MACHINE A by installing MACHINE B. [Given: PVIFA (14%, 5 years) = 3.433 and PVIF (14%, 5 years) = 0.519] (Solve the problem by an incremental cash flow approach.)

(b) ZZZ Co. has three potential projects all with an initial cost of ₹ 15,00,000. The capital budget for the year will only allow the company to take up only one of the three projects. Given the discount rates and the future cash flows of each project, advise which project should they accept?

PROJECT	Annual Net Cash Flows per year for five years (₹)	Discount Rates
A	3,50,000	4%
B	4,00,000	8%
C	5,00,000	10%

[9 + 6 = 15]

7. (a) A firm is considering pushing up its sales by extending credit facilities to any one of the following categories of customers: (i) Customers with a 10% risk of non-payment, and (ii) Customers with a 25% risk of non-payment. The incremental sales expected in category (i) is ₹ 2,40,000 and in category (ii) is ₹ 6,50,000. The cost of production and selling costs are 60% of sales while the collection costs amount to 5% of sales in case of category (i) and 10% of sales in case of category (ii).
You are required to analyse the profitability of the proposals of extending credit facilities to the two categories of customers. (Use sale value for bad debts).

(b) GOLDILOCKS LTD. sells goods to domestic market on a gross profit of 25% on sales without considering depreciation. Its estimates for the year 2023-24 are as follows:

	(Amount in ₹ Lakh)
Sales:	
Domestic Market at 2 months' Credit	1,600
Export (Selling price 10% below home price)	540
(Exports at 3 months' Credit)	

Cost:

Materials used (Suppliers extend 2 months' Credit)	600
Wages paid (1/2 month in Arrear)	400
Manufacturing Expenses (Paid 1 month in Arrear)	600
Sales Promotion (Payable quarterly in advance)	80
Administration Expenses (Paid 1 month in Arrear)	200

The company maintains one month's stock of each raw material and finished goods. A cash balance of ₹ 20 lakh is also maintained. There is no Work-in-Progress (WIP). All expenses and incomes are made evenly throughout the year. Required: Prepare a statement of Working Capital Requirements of the Company for 2023-24 on Cash Cost basis. **[8 + 7 = 15]**

8. (a) 'Data visualization is indispensable for managers who wish to comprehend and communicate the significance of the data flood we are all experiencing.' Do you agree with this statement? Critically explain with appropriate examples.?

(b) How are data processing and data science related to finance? Mention the relevance in the areas of risk analytics, real time analytics and customer data management.

[7 + 8 = 15]