

**INTERMEDIATE EXAMINATION****SET 1****MODEL QUESTION PAPER****TERM – DEC 2025****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)** Risk of two securities having different expected returns can be compared using:

- a. Standard deviation
- b. Variance
- c. Coefficient of Variation
- d. None of the above

**(ii)** Find the present value of ₹ 1,000 receivable 6 years hence if the rate of discount is 10%.

- a. 564.5
- b. 554.5
- c. 574.5
- d. 600

**(iii)** Calculate the future value of ₹1,000 invested in State Bank Cash Certificate scheme for 2 years @ 5.5% p.a., compounded semi-annually.

- a. ₹1,114.62
- b. ₹1,104.62
- c. ₹1,401.51
- d. ₹1,141.51

**(iv)** A company is planning to issue a discount bond with a par value of ₹1,000, implicit interest rate of 11.5% and a redemption period of 5 years. The company also intends to offer an early bird incentive of 1.5%. The issue price (rounded up to nearest rupee) will be [Given: PVIF (11.5%, 5 years) = 0.5803]

- a. ₹ 580
- b. ₹ 572
- c. ₹ 543
- d. ₹ 490

**(v)** The type of collateral (security) used for short-term loan is:

- a. Real estate
- b. Plant & Machinery
- c. Stock of good
- d. Equity share capital



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- (vi) A ratio \_\_\_\_\_ of is considered satisfactory by the financial institutions the greater debt service coverage ratio indicates the better debt servicing capacity of the organization.
- 1
  - 2
  - 3
  - 4
- (vii) Cash Flow Statement is \_\_\_\_\_ for Income Statement or Funds Flow Statement.
- not a substitute
  - substitute
  - depends on situation
  - None of the above
- (viii) If the CAPM is used to estimate the cost of equity capital, the expected excess market return is equal to the:
- Return on the stock minus the risk-free rate.
  - Difference between the return on the market and the risk-free rate.
  - Beta times the market risk premium.
  - Beta times the risk-free rate
- (ix) A company has expected Net Operating Income – ₹ 4,80,000; 10% Debt – ₹14,40,000 and Equity Capitalisation rate - 20% what is the weighted average cost of capital for the company?
- 0.15385
  - 0.13585
  - 0.18351
  - 0.15531
- (x) The discounted cash flows techniques are:
- Net Present Value (NPV)
  - Internal Rate of Return (IRR)
  - Profitability Index (PI)
  - All of the above
- (xi) Payback period in which an expected cash flows are discounted with help of project cost of capital is classified as \_\_\_\_\_.
- discounted payback period
  - discounted rate of return
  - discounted cash flows
  - discounted project cost



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- (xii) 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 \_\_\_\_\_.
- 40 Days
  - 43 Days
  - 45 Days
  - 50 Days
- (xiii) Conversation of marketable securities into cash entails a fixed cost of ₹ 1,000 per transaction. What will be the optimal conversation size as per Baumol model of cash management?
- ₹ 315,628
  - ₹ 316,228
  - ₹ 317,678
  - ₹ 318,426
- (xiv) The geometric distribution is a discrete distribution that assesses \_\_\_\_\_.
- the probability of the occurrence of the first success
  - the probability of the occurrence of the second success
  - the probability of the occurrence of the third success
  - the probability of the occurrence of the less success
- (xv) \_\_\_\_\_ is a set of skills that aims to identify, find, modify, format, and present data in a manner that ideally conveys meaning and provides insight.
- Data Presentation Architecture
  - Data Presentation Hierarchy
  - Data Visualization Architecture
  - None of the above

**Section – B**

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

[5 x 14 = 70]

2. (a) Describe the various functions RBI. [7]
- (b) Describe the implementation of data mining techniques in the fields of finance and management. [7]



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3. (a) The following are the ratios relating to the activities of X Ltd.

Debtors' velocity (months)	3
Stock velocity (months)	8
Creditors' velocity (months)	2
Gross profit ratio (%)	25

Gross profit for the current year ended December, 31st, 2024 amounts to ₹ 4,00,000.

Closing stock of the year is ₹ 10,000 above the opening stock. Bills receivables amount to ₹ 25,000 and bills payable to ₹ 10,000.

Calculate:

- Sales,
- Closing Stock, and
- Sundry Creditors.

[7]

(b) The Balance Sheets of a company as on 31st March, 2024 and 2025 are given below:

Liabilities	31.03.24 ₹	31.03.25 ₹	Assets	31.03.24 ₹	31.03.25 ₹
Equity Share Capital	14,40,000	19,20,000	Fixed Assets	38,40,000	45,60,000
Capital Reserve	--	48,000	Less: Depreciation	(11,04,000)	(13,92,000)
General Reserve	8,16,000	9,60,000		27,36,000	31,68,000
Profit & Loss A/c	2,88,000	3,60,000	Investment	4,80,000	3,84,000
9% Debentures	9,60,000	6,72,000	Sundry Debtors	12,00,000	14,00,000
Sundry Creditors	5,50,000	5,90,000	Stock	1,40,000	1,84,000
Bills Payable	26,000	34,000	Cash in hand	4,000	--
Proposed Dividend	1,44,000	1,72,800	Preliminary Expenses	96,000	48,000
Provision for tax	4,32,000	4,08,000			
Unpaid dividend	--	19,200			
	46,56,000	51,84,000		46,56,000	51,84,000

**Additional Information:**

During the year ended 31st March, 2025 the company:

- Sold a machine for ₹ 1,20,000; the cost of machine was ₹ 2,40,000 and depreciation provided on it was ₹ 84,000.
- Provided ₹ 4,20,000 as depreciation on fixed assets.
- Sold some investment and profit credited to capital reserve.
- Redeemed 30% of the debenture @ 105.
- Decided to write off fixed assets costing ₹ 60,000 on which depreciation amounting to ₹ 48,000 has been provided.

You are required to prepare Cash Flow Statement as per Ind AS-7.

[7]



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4. From the following balance sheet prepare a common size statement and comment:

Particulars	Amount (₹) 31.03.2024	Amount (₹) 31.03.2025
Shareholders' Fund		
Equity Share Capital (₹10 each)	7,20,000	7,20,000
Reserve & Surplus	2,88,000	5,46,000
Non-current Liabilities		
Long-term debt	5,46,000	5,08,000
Current Liabilities		
Current Liabilities & Provisions	2,40,000	1,75,500
Total	18,00,000	19,50,000
Non-current Assets		
Fixed Assets	12,06,000	11,70,000
Current Assets		
Inventory	2,52,000	3,51,000
Debtors	1,80,000	1,95,000
Bank	1,62,000	2,34,000
Total	18,00,000	19,50,000

[7]

- (b) From the following information in respect of a company, you are required to calculate the cost of equity using CAPM approach:

- Risk-free rate of return 12%
- Expected market price of equity shares at the year-end is ₹1,400
- Initial price of investment in equity shares of the company is ₹1,200
- Beta risk factor of the company is 0.70
- Expected dividend at the year-end is ₹ 140

[7]

5. (a) A machine costing ₹12,00,000 is required to undertake a proposed project. The effective life of the machine is expected to be 5 years with residual value of ₹2,00,000. The company follows SLM of charging depreciation. The estimated EBT of the project are as follows:

Year	1	2	3	4	5
EBIT (₹)	4,80,000	5,60,000	6,40,000	4,00,000	3,20,000

If tax rate is 40% and cost of capital is 15%, calculate the NPV and suggest whether the machine should be acquired or not.



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Given the PV of Re.1 at 15% discount rate:

Year	1	2	3	4	5
PVIF	0.8696	0.7561	0.6575	0.5718	0.4972

[7]

- (b) A project requires an initial investment of ₹3,00,000. It yields cash inflow of ₹60,000, ₹50,000, ₹70,000, ₹75,000, ₹90,000, ₹60,000 for next 6 years. You are required to evaluate the pay-back period of the project.

[7]

6. (a) Prepare a working capital forecast from the following information:

Production during the previous year was 20,00,000 units. The same level of activity is intended to be maintained during the current year. The expected ratios of cost to selling price are:

Raw materials	40%
Direct Wages	20%
Overheads	20%

The raw materials ordinarily remain in stores for 3 months before production. Every unit of production remains in the process for 2 months and is assumed to be consisting of 100% raw material, wages and overheads. Finished goods remain in the warehouse for 3 months. Credit allowed by creditors is 4 months from the date of the delivery of raw material and credit given to debtors is 3 months from the date of dispatch.

The estimated balance of cash to be held ₹ 4,00,000

Lag in payment of wages ½ month Lag

in payment of expenses ½ month

Selling price is ₹8 per unit. You are required to make a provision of 10% for contingency (except cash).

Relevant assumptions may be made.

[7]

- (b) A Ltd. has received an offer of quantity discounts on its order of materials as under:

Ordering quantities (Kgs)	Price per kg. (₹)
Less than 500	24.00
500 but less than 1600	23.60
1,600 but less than 4000	23.20
4,000 but less than 8,000	22.80
8,000 and above	22.40



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The annual requirement for the material is 8,000 kgs. The ordering cost per order is ₹ 13.00 and the stock holding cost is estimated at 20% of material cost per annum. As a Cost and Management Accountant you have to calculate the most Economical Ordering Quantity.

[7]

7. (a) The following figures are collected from the annual report of PQR Ltd.:

Net profit	₹60 Lakhs
Outstanding 12% Preference shares	₹200 Lakhs
Number of Equity shares	6 Lakhs
Return on Investment	20%
Cost of capital	16%

Calculate the approximate dividend payout ratio of PQR Ltd. so as to keep the share price at ₹42, using Walter's model. [7]

(b) A company had the following balance sheet as on 31 March 2025:

Liabilities	₹	Assets	₹
Equity Share Capital of ₹10 each	40,00,000	Fixed assets (net)	1,28,00,000
Reserves and Surplus	8,00,000	Current assets	32,00,000
15% Debentures	80,00,000		
Current liabilities	32,00,000		
	1,60,00,000		1,60,00,000

Additional information:

Fixed costs per annum (excluding Interest)	₹32,00,000
Variable operating costs ratio	70%
Total assets turnover ratio	2.5
Income tax rate	40%

Required:

Calculate the following and comment:

- Operating Leverage
- Financial Leverage
- Combined Leverage
- Earnings Per Share



**FINANCIAL MANAGEMENT AND BUSINESS DATA ANALYTICS**

8. (a) Explain the six core steps that may turn the data into user friendly information. [7]
- (b) Explain the benefits of data analytics. [7]