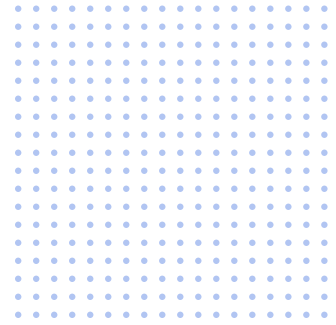




FOR CMA INTERMEDIATE EXAM PREPARATION

CMA Intermediate 2024 Question Paper - Paper 11 Financial Management and Business Data Analytics

EXAM

CMA Intermediate

YEAR

2024

TYPE

Question Paper

SUBJECT

Paper 11 Financial Management and Business Data Analytics

INTERMEDIATE EXAMINATION

December 2024

P-11(FMDA)**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.**Where considered necessary, suitable assumptions may be made
and clearly indicated in the answer.**All working notes should form part of your answer.***Section-A (Compulsory)****1. Choose the correct option from the four alternatives given:****2×15=30**

- (i) Which of the following is a widely used graph for Data Visualisation?
- (A) Bar chart
(B) Pie chart
(C) Histogram
(D) All of the above
- (ii) If the operating leverage is 1.22, the sales for the year is ₹ 75 lakhs, the variable cost is ₹ 42 lakhs, then the EBIT is equal to _____.
- (A) ₹ 32 lakhs
(B) ₹ 27 lakhs
(C) ₹ 31 lakhs
(D) ₹ 31.5 lakhs
- (iii) Operating leverage arises because of _____.
- (A) Fixed Cost of Production
(B) Fixed Interest Cost
(C) Variable Cost
(D) Step Cost
- (iv) Suppliers and Creditors of a firm are primarily interested in _____.
- (A) Profitability Position
(B) Liquidity Position
(C) Market Share Position
(D) Debt Position

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- (v) Which of the following does not help to increase Current Ratio?
- (A) Issue of Debentures to buy Stock
 - (B) Issue of Debentures to pay Creditors
 - (C) Sale of Investment to pay Creditors
 - (D) Avail Bank Overdraft to buy Machine
- (vi) 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.
- (vii) A firm has EBIT of ₹ 50,000. Market value of debt is ₹ 80,000 and overall capitalization rate is 20%. Market value of firm under NOI Approach is _____.
- (A) ₹ 2,50,000
 - (B) ₹ 1,70,000
 - (C) ₹ 30,000
 - (D) ₹ 1,30,000
- (viii) Which one of the following is not a feature of Certificate of Deposits?
- (A) The minimum lock-in period for CDs is 30 days.
 - (B) The minimum issue size of CDs are ₹ 1,00,000.
 - (C) CDs are transferable by endorsement and delivery.
 - (D) CDs attract stamp duty as applicable to negotiable instruments.
- (ix) Which one of the following is not applied in determining the credit policy of a firm?
- (A) Credit period or duration of credit
 - (B) Level of credit sales to optimize profits
 - (C) Collection policy
 - (D) Cost of goods sold
- (x) A company is considering two capital structures. Plan A consists of 100% equity with 10,000 shares outstanding at ₹ 100 each. Plan B consists of 50% debt and 50% equity, where the debt is ₹ 5,00,000 at 10% interest, and there are 5,000 shares outstanding at ₹ 100 each. If the EBIT is ₹ 1,50,000 and tax rate is 30%, what is the EPS under Plan B?
- (A) ₹ 14
 - (B) ₹ 17
 - (C) ₹ 20
 - (D) ₹ 18

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- (xi) Given, risk-free rate of return = 6 %; market return = 11%; cost of equity = 15%; value of beta (β) is _____.
- (A) 1.9
 - (B) 1.8
 - (C) 2.0
 - (D) 2.2
- (xii) The procedure that organises data into a meaningful order to make it simpler to comprehend, analyse and visualise, is called _____.
- (A) Data validation
 - (B) Data sorting
 - (C) Data aggregation
 - (D) Data analysis
- (xiii) Which of the following is/are the type(s) of cloud computing?
- (A) Private cloud
 - (B) Public cloud
 - (C) Hybrid cloud
 - (D) All of the above
- (xiv) If the company's D/P ratio is 60% and ROI is 15%, what should be the growth rate under Gordon model?
- (A) 5.5%
 - (B) 7.2%
 - (C) 6.0%
 - (D) 9.6%
- (xv) Which financial metric is crucial for understanding a firm's Cash Management efficiency?
- (A) Gross Profit Margin
 - (B) Cash Conversion Cycle
 - (C) Operating Profit
 - (D) Return on Capital Employed

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(4)

SECTION – B

Answer any five questions from the following. Each question carries 14 marks. $14 \times 5 = 70$

2. (a) What are the principal features of a commercial paper? Discuss the advantages offered by commercial paper to its issuers. 7
- (b) What do you mean by Descriptive Analytics? Explain the information revealed by Descriptive Analytics. 7
3. (a) The following information is available about Boxa Company:

Accounts payable	₹ 100 lakhs
Accounts receivable	₹ 50.48 lakhs
Average inventory	₹ 300 lakhs
Buildings and land	?
Cash	₹ 50 lakhs
Cost of goods sold	₹ 800 lakhs
EBIT	₹ 180 lakhs
Long-term bonds	₹ 250 lakhs with 10% interest rate
Price per share	₹ 72
Price/Earnings ratio	18
Shareholders' equity	?
Total assets	₹ 1,000 lakhs
Total sales	₹ 1,250 lakhs
Cash sales	₹ 100 lakhs

You are required to calculate the following:

- (i) Days sales outstanding
 - (ii) Interest coverage ratio
 - (iii) Debt ratio
 - (iv) Inventory turnover ratio
 - (v) Earnings per share 7
- (b) A firm wants to know whether it belongs to the non-bankrupt class of firms. Certain figures are extracted from the financial statements of the firm. You are required to use Altman's Z score model and place the firm in the appropriate class.
- Sales: ₹ 20,00,000
 - EBIT: ₹ 10,00,000
 - Total Assets: ₹ 40,00,000
 - Book Value of Total Liabilities: ₹ 16,00,000
 - Retained Earnings: ₹ 24,00,000
 - Market Value of Equity: ₹ 80,00,000
 - Working Capital: ₹ 8,00,000 7

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4. (a) Prepare a Common-size Income Statement from the following income statements and interpret the same. 7

INCOME STATEMENT

Particulars	31st March 2023 ₹	31st March 2024 ₹
Gross Sales	10,30,000	12,42,000
Less: Sales Returns	30,000	42,000
Net Sales	10,00,000	12,00,000
Less: Cost of Goods Sold	6,00,000	6,60,000
Gross Profit	4,00,000	5,40,000
Less: Operating Expenses:		
Administrative Expenses	85,000	1,14,000
Selling Expenses	2,00,000	1,93,200
Total Operating Expenses	2,85,000	3,07,200
Income from Operations	1,15,000	2,32,800
Add: Non-operating Income	24,000	34,200
Total Income	1,39,000	2,67,000
Less: Non-operating Expenses	36,000	53,280
Net Profit	1,03,000	2,13,720

- (b) Prakash Packers Ltd. has the following capital structure:

Particulars	₹ (in lakhs)
Equity Share Capital (Rs.10 each)	200
14% Preference Share Capital (Rs.100 each)	100
Retained Earnings	100
12% Debentures (Rs.100 each)	300
11% Term Loan from Bank	50
Total	750

Additional Information:

- The market price per equity share is ₹ 32. The company is expected to declare a dividend per share of ₹ 2 per share and there will be a growth of 10% in dividends for the next 5 years.
- The preference shares are redeemable at a premium of ₹ 5 per share after 8 years and are currently traded at ₹ 84 in the market.

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(iii) Debenture redemption will take place after 7 years at a premium of ₹ 5 per debenture and the current market price is ₹ 90 per debenture.

(iv) The corporate tax rate is 40%.

You are required to calculate the weighted average cost of capital using book value weights. 7

5. (a) From the following information, calculate Net Present Value of the following business proposal and suggest whether the proposal should be accepted or rejected: 7

Initial Investment in Fixed Assets	₹ 5,00,000
Initial Investment in Working Capital	₹ 1,00,000
Salvage Value of Fixed Assets after 3 years	₹ 2,00,000
Annual Cash inflows before tax	₹ 3,00,000
Income tax rate (on profit as well as capital gain)	30%
Cost of capital	18%

Depreciation is to be charged under WDV method @40%.

Present Values of Re. 1.00 at 18% are as follows:

Year	1	2	3
PVIF	0.8475	0.7182	0.6086

- (b) A project, requiring initial investment of ₹ 5,00,000 in creating a fixed facility, ensures net incremental inflow of ₹ 1,50,000 per annum before deduction of depreciation and tax. The fixed facility is likely to have an economic life of five years with scrap value of ₹ 1,00,000 at the end. Depreciation is allowed on straight-line basis and marginal tax rate is 40%. The cost of capital is 10% p.a.

You are required to estimate the IRR of the project and advise the management on its acceptability. 7

Consider the following Present Value table:

Year	1	2	3	4	5
PVIF @ 10%	0.909	0.826	0.751	0.683	0.621
PVIF @ 11%	0.901	0.812	0.731	0.659	0.593
PVIF @ 12%	0.893	0.797	0.712	0.636	0.567

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6. (a) JBC Ltd. sells goods at a gross profit of 25%. Depreciation is considered as a part of cost of production. The following are the annual figures given to you:

Sales (2 months' credit)	₹ 18,00,000
Materials consumed (1 month credit)	₹ 4,50,000
Wages paid (1 month lag in payment)	₹ 3,60,000
Cash manufacturing expenses (1 month lag in payment)	₹ 4,80,000
Administrative expenses (1 month lag in payment)	₹ 1,20,000
Sales promotion expenses (paid quarterly in advance)	₹ 60,000

The company keeps one month's stock each of raw materials and finished goods. It also keeps ₹ 1,00,000 in cash.

You are required to estimate the working capital requirements of the company on cash cost basis, assuming 15% safety margin. 7

(b) Himalaya Refrigeration Company purchases 1,600 units of a component annually, from Bolts & Pins Associates. The annual cost of holding each unit of component is ₹ 8 and the cost of placing order each time is ₹ 100.

You are required to calculate:

- (i) Economic Order Quantity;
- (ii) Reorder Level; and
- (iii) Maximum and Minimum Inventory Level, if the company operates 320 days in a year, material procurement time is 10 days, and safety stock is 20 units. Assume minimum consumption rate per day = average consumption rate per day. 7

7. (a) Jai & Karti Ltd. has a capital of ₹10 lakhs in equity shares of ₹100 each. The shares are currently quoted at par. The company proposes declaration of a dividend of ₹ 10 per share at the end of the current financial year. The capitalization rate for the risk class to which the company belongs is 12%. What will be the market price of the share at the end of the year, if

- (i) a dividend is not declared?
- (ii) a dividend is declared?

Assuming that the company pays the dividend and has net profits of ₹ 5,00,000 and makes new investments of ₹ 10 lakhs during the period, how many new shares must be issued? 7

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- (b) Alpha Pharma Ltd., which has been engaged in business for the last five years, furnishes the following information for its only product Metmorphin Hydrochloride which is being sold at ₹ 23 per unit:

Total Sales:	1,45,000 units
Fixed Cost:	₹ 2,80,000
Variable Cost:	₹ 17 per unit
Debt Capital:	₹ 10,00,000 @ 11% interest rate
Equity Capital:	₹ 20,00,000

Face Value of each share of the company is ₹ 10.

Tax rate applicable is 30%.

- (i) What is the number of units that should be sold so that the Earnings before Taxes (EBT) is equal to zero?
 - (ii) If Earnings before Interest & Taxes (EBIT) increase to three times the current EBIT, then what is the Earnings after Taxes (EAT)?
 - (iii) What will be the degree of operating, financial and combined leverage? 7
8. (a) What do you mean by Data Ethics? Discuss the five basic principles of Data Ethics that a business organisation should follow. 7
- (b) What is Business Intelligence (BI)? List the procedures to which the use of BI has expanded. 7