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.

Answer:

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
a	d	a	a	a	d	b	c	a	c	b	b	a	a	b

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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]

   Answer:

   (a) Different types of Money Market Instruments:

   Call Money:
   Call/Notice money is an amount borrowed or lent on demand for a very short period. If the period is more than one day and upto 14 days, it is called notice money and if the period is more than 14 days, it is called call money.

   Treasury Bills:
   Treasury bills are short-term instruments issued by the Reserve Bank on behalf of the government to tide over short-term liquidity shortfalls. This instrument is used by the government to raise short-term funds to bridge seasonal or temporary gaps between its receipts (revenue and capital) and expenditure. They form the most important segment of the money market not only in India but all over the world as well.

   Commercial Bills:
   The working capital requirement of business firms is provided by banks through cash-credits / overdraft and purchase/discounting of commercial bills.
   Commercial bill is a short term, negotiable, and self-liquidating instrument with low risk. It enhances the liability to make payment in a fixed date when goods are bought on credit.

   Commercial Paper:
   Commercial paper (CP) is an unsecured short-term promissory note, negotiable and transferable by endorsement and delivery with a fixed maturity period. It is issued only by large, well known, creditworthy companies and is typically unsecured, issued at a discount on face value, and redeemable at its face value. the aim of its issuance is to provide liquidity or finance company's investments, e.g., in inventory and accounts receivable.

   Certificate of Deposits (CD):
   CD is a negotiable money market instrument and issued in dematerialized form or as a usance promissory note, for funds deposited at a Bank or other eligible Financial Institution for a specified time period.

   Repo, Reverse Repo:
   Repo or ready forward contact is an instrument for borrowing funds by selling securities with an agreement to repurchase the said securities on a mutually agreed future date at an agreed price which

includes interest for the funds borrowed. Repo rate is the return earned on a repo transaction expressed as an annual interest rate.

The Reverse of the repo transaction is called 'reverse repo' which is lending of funds against buying of securities with an agreement to resell the said securities on a mutually agreed future date at an agreed price which includes interest for the funds lent.

Promissory Notes and Government Securities:

Promissory Note is a written, dated and signed two-party instrument containing an unconditional promise by the maker to pay a definite sum of money to a payee on demand or at a specified future date.

A government security is a tradable instrument issued by the central government or the state governments. It acknowledges the Government's debt obligation. Such securities are short-term (usually called treasury bills, with original maturities of less than one year) or long-term (usually called Government bonds or dated securities with original maturity of one year or more).

(b) Benefits of data analytics:

Following are the benefits of data analytics:

(i) Improves decision making process

Companies can use the information gained from data analytics to base their decisions, resulting in enhanced outcomes. Using data analytics significantly reduces the amount of guesswork involved in preparing marketing plans, deciding what materials to produce, and more. Using advanced data analytics technologies, you can continuously collect and analyse new data to gain a deeper understanding of changing circumstances.

(ii) Increase in efficiency of operations

Data analytics assists firms in streamlining their processes, conserving resources, and increasing their profitability. When firms have a better understanding of their audience's demands, they spend less time creating advertising that do not fulfil those needs.

(iii) Improved service to stakeholders

Data analytics gives organisations with a more in-depth understanding of their customers, employees and other stake holders. This enables the company to tailor stakeholders' experiences to their needs, provide more personalization, and build stronger relationships with them.

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	73days

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.

Answer:

(a) Given Gross Profit = 60,000

G.P. Ratio = 20%

$$\text{Sales} = 60,000 \times \frac{100}{20} = 3,00,000$$

Cost of Sales = Sales – Gross Profit

$$= 3,00,000 – 60,000$$

$$= 2,40,000$$

Stock turnover given = 6

$$= \frac{\text{Cost of Sales}}{\text{Average Stock}}$$

$$= \frac{2,40,000}{6}$$

$$= 40,000$$

Average Stock = 40,000

Let x be the opening stock, then the closing stock will be x + 5000

$$\text{Then, Average Stock} = \frac{x + (x + 5000)}{2}$$

40,000 = x + 2500

x = 37500

Opening Stock = x = 37500

Closing Stock = x + 5000 = 37500 + 5000 = 42500

Debtors Velocity (Given) = 2 months

$$\text{Debtors} = \frac{\text{Sales} \times \text{Debtors collection period}}{12\,(\text{No.of Months})} = 3,00,000 \times \frac{2}{12} = 50,000$$

Purchases + Opening Stock – Closing Stock = Cost of Sales

Purchases + 37500 – 42500 = 2,40,000

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Purchases – 5000 = 2,40,000

Purchase = 2,45,000

Creditors Velocity (given) = 73 days

Creditors amount = $2,45,000 \times \dfrac{73}{365} = 49,000$

FA Turnover given on Cost of Sales = 4

$\dfrac{COS}{FA} = 4$

$\dfrac{2,40,000}{FA} = 4$

$FA = \dfrac{2,40,000}{4}$

FA = 60,000

Capital Turnover (Given) = 2

$\dfrac{COS}{Capital} = 2$

$\dfrac{2,40,000}{Capital} = 2$

$Capital = \dfrac{2,40,000}{2}$

Capital = 1,20,000

Balance Sheet

Liabilities	₹	Assets	₹
Capital	1,20,000	Fixed Assets	60,000
Reserves & Surplus	20,000	Current Assets:	
Creditors	49,000	Stores	42,500
		Debtors	50,000
		Cash (Bank B/F)	36,500
	1,89,000		1,89,000

(b)

Profit made during the year		2,50,000
(+) Increase in Income received in Advance	100	
(+) Decrease in Prepaid Expenses	200	
(-) Increase in Debtors	(15,000)	
(+) Decrease in Bills Receivable	5,000	
(-) Decrease in Creditors	(5,000)	
(+) Increase in Bills Payable	2,000	
(-) Decrease in Outstanding Expenses	(500)	
(+) Decrease in Accrued Income	300	(12,900)
Net Cash from Operating Activities		2,37,100

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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

By computing the trend ratios, 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:

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]

Answer:

(a) Computation of Trend Percentage

Particulars	Absolute Changes	Trend %	
		2018	2022
Working capital	1,48,97,945	100	163.8
Plant & Machinery	1,41,98,415	100	242.3
Long-term borrowings	67,20,000	100	192.31
Net Tangible assets	2,17,95,860	100	177.62

Interpretation of changes:

Trend percentage depicts that there is an increase of 142.3% in plant and machinery while an increase in working capital is 63.79%. These trend percentages show that there is rapid increase in

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fixed assets. But if we see the changes in absolute figures of above said both items then just opposite result comes before us.

Working capital is increased by ₹1,48,97,945 and plant and machinery is increased by ₹1,41,98,415. On the basis of trend percentage, it can be said that finance has been provided from long term borrowing and working capital for purchasing plant and machinery.

There is an increase of 92.31% and 77.6% respectively in long term debt and net tangible assets which is undesirable because more increase in long term debts in comparison to net tangible assets is the indicator of increasing debt burden.

(b) Cost for each source and WACC:

Debenture:
Coupon rate (Interest rate) = 13%
Interest = 13% × 100 = 13
RV = 100
NS = 100 – 4% floatation costs = 96
N = 10 years
T = 50%

$$K_d = \frac{Int\,(1-T) + \dfrac{RV - NS}{N}}{(\dfrac{RV + NS}{2})} \times 100$$

$$= \frac{13\,(1-0.5) + \dfrac{100 - 96}{10}}{(\dfrac{100 + 96}{2})} \times 100$$

$$= \frac{6.5 + 0.4}{98} \times 100$$

$$= 7.04\%$$

Preference dividend = 14% × 100 = 14
NS = 100 – 5% Floatation Costs
     = 95
Ddt = Nil
N = 10 Years

$$\text{Cost of Preference shares} = K_p = \frac{Pd\,(1 + Ddt) + (\dfrac{RV - NS}{N})}{(\dfrac{RV + NS}{2})} \times 100$$

$$= \frac{14\,(1 + 0) + (\dfrac{100 - 95}{10})}{(\dfrac{100 + 95}{2})} \times 100$$

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$$= \frac{14 + 0.5}{97.5} \times 100 \qquad = 14.87\%$$

$$K_e = (\frac{D_1}{P_0} \times 100) + g$$

$D_1 = 2$

Growth rate $= g = 7$

$P_0 = 22 - 2$ (floatation cost) $= 20$

$$K_e = (\frac{D_1}{P_0} \times 100) + g$$

$$= (\frac{2}{20} \times 100) + 7\%$$

$$= 17\%$$

WACC based on Book Value Weights

Source	Amount	Weight	Cost	K_0 = Weight × Cost
Debenture	8,00,000	$\frac{8}{20} = 0.4$	7.04%	2.816
Preference Shares	2,00,000	$\frac{2}{20} = 0.1$	14.87%	1.487
Equity Shares	10,00,000	$\frac{10}{20} = 0.5$	17%	8.50
	20,00,000	1.00		12.803

Source	Amount	Weight	Cost	K_0 = W×C
Debenture	$(8,00,000 \times \frac{110}{100}) = 8,80,000$	0.265	7.04%	1.8656
Preference Shares	$(2,00,000 \times \frac{120}{100}) = 2,40,000$	0.072	14.87%	1.07064
Equity Shares	$(10,00,000 \times \frac{22}{10}) = 22,00,000$	0.6626	17%	11.2642
	33,20,000	1.00		14.20

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]

Answer:

(a)   Computation of selling price in order to get a return of 15%

Let 'x' be the selling price, then sales will be 8000x

Sales	8000x
Variable Cost [8000 × 250]	20,00,000
Contribution	8000x – 20,00,000
Fixed Cost [Adv. + Others]	-1,50,000
Additional Fixed Cost	-75,000
Depreciation [$\frac{25,00,000}{4}$]	-6,25,000
	8000x – 28,50,000
Tax @ 40%	-3200x – 11,40,000
	4800x – 17,10,000
(+) Depreciation	6,25,000
CIF	4800x – 10,85,000

CIF for a period of 4 years and the required return on investment is 15%

CUM CIF for Annuity factor @ 15% (given)   = 3.0079

P.V. of CIF Disc @ 15% for 4 years must be atleast   = 25,00,000

∴ 3.0079 × (4800x – 10,85,000) = 25,00,000

14438x – 32,63,572   = 25,00,000

14438x = 25,00,000 + 32,63,572

14438x = 57,63,572

x = 399.19

Selling price must be at least ₹ 399.19= ₹ 400

(b) We can calculate the discounted payback period as follows:

Computation of DPBP

Period	Cash Inflows Amount (₹)	PVIF @ 12%	Present Value (₹)	Cumulative Present Value (₹)
Year 1 (2019)	95,000	0.893	84,835	84,835
Year 2 (2020)	80,000	0.797	63,760	1,48,595
Year 3 (2021)	60,000	0.712	42,720	1,91,315
Year 4 (2022)	55,000	0.636	34,980	2,26,295

In this case, we see that the project's payback period is 3 years.

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 requirements of Working Capital of the company on cash cost basis.

(b) **X Ltd. buys its annual requirement of 36,000 units in six installments. 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]**

Answer:

(a) Computation of working capital requirement:

W.N. – 1

Particulars	₹
Sales given	27,00,000
(-) G.P. @ 20% × 27,00,000	5,40,000
Cost of Production	21,60,000

Expenses:

Particulars	₹
Material	6,75,000
Wages	5,40,000
Manufacturing expenses [60,000 × 12]	7,20,000
Cash expenses for cost of production	19,35,000
Depreciation = [21,60,000 – 19,35,000]	2,25,000
Cost of Production – Cash expenses	19,35,000
(+) Admn expenses	1,80,000
(+) Sales promotion exp.	90,000
Total Cash Cost	22,05,000

Computation of working capital on cash cost basis

W.N. – 1:

(i) Computation of Depreciation & cash cost

Particulars	₹
Sales	24,00,000
(-) Costs	6,00,000
Material Costs	4,80,000
Wages	6,00,000
Manufacturing expenses	16,80,000
GP before depreciation = 24,00,000 – 16,80,000	7,20,000
G.P. is given = 24,00,000 × 20%	4,80,000
Depreciation	2,40,000

(ii)

Particulars	₹
Cost of production – cash exp. (Other than Dep.)	16,80,000
(+) Admn expenses	1,50,000
(+) Sales promotion	75,000
Total Cash Cost	19,05,000

Computation of working capital:

Particulars	₹
Current Assets:	
(i) Debtors [$19,05,000 \times \frac{2}{12}$]	3,17,500
(ii) Raw Material [$6,00,000 \times \frac{1}{12}$]	50,000
(iii) Finished Goods [$16,80,000 \times \frac{1}{12}$]	1,40,000

(iv)	Prepaid sales promotion [75,000 × $\frac{1}{4}$]		18,750
(v)	Cash balance		80,000
			6,06,250

(b)   Economic Ordering Quantity = $\sqrt{\dfrac{2AO}{C}}$

Where,

A = Annual demand, O = Ordering Cost, C = Carrying Cost

$EOQ = \sqrt{\dfrac{2 \times 36,000 \times ₹25}{₹1 \times 20\%}}$

$EOQ = \sqrt{\dfrac{18,00,000}{₹1 \times 20\%}}$ EOQ = 3,000 Units

	Particulars	Existing Policy (₹)		EOQ (₹)	
(i)	Purchase Cost	(36,000 × 1)	36,000	(36,000 × 1)	36,000
(ii)	Ordering Cost	[36,000 / 6,000 × 25]	150	[36,000 / 3,000 × 25]	300
(iii)	Carrying Cost	[1/2 × 6,000 × 1 × 20%]	600	[1/2 × 3,000 × 1 × 20%]	300
			36,750		36,600

Saving by using EOQ = ₹ 36,750 – ₹ 36,600 = ₹ 150

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]**

Answer:

   (a)   Computation of share price before and after the decision of the Finance Manager.

Before the finance manager's decision:

We know that $K_e = R_f + \beta(R_m - R_f)$

               $K_e = 9\% + 1.5 (13\% - 9\%)$

                   $= 9\% + 1.5 (4\%)$

$= 15\%$

Growth rate given (g) = 7%

$D_0 = ₹\,2$

Expected Dividend $D_1 = 2(1+7\%) = 2.14$

$$P_0 = \frac{D_1}{K_e - g} = \frac{2.14}{15\% - 7\%} = ₹\,26.75$$

After Finance Manager's decision

Revised K_e = 9% + 1.75 (13% - 9%) = 9% + 1.75 (4%) = 16%

$$\text{Revised Share Price} = \frac{D_1}{K_e - g} = \frac{2.14}{16\% - 7\%} = ₹\,23.77$$

(b) (i) ROI = EBIT/Investment

EBIT = Sales – VC – FC

  = ₹ 75 lakh – ₹ 42 lakh – ₹ 6 lakh

  = ₹ 27 lakh

ROI = ₹ 27 lakh / ₹ 100 lakh

  = 27 %

(ii) Yes, the firm has favourable financial leverage as its ROI is higher than the interest on debt.

(iii) Asset turnover = Sales/Total Assets or Total Investments = ₹ 75 lakh/₹ 100 lakh = 0.75. It is lower than the industry average.

(iv) $$\text{Operating Leverage} = \frac{\text{Sales - Variable Costs}}{\text{EBIT}} = \frac{₹\,75\,\text{lakh} - ₹\,42\,\text{lakh}}{₹\,27\,\text{lakh}} = 1.22$$

$$\text{Financial Leverage} = \frac{\text{EBIT}}{\text{EBIT - Interest}} = \frac{₹\,27\,\text{lakh}}{₹\,27\,\text{lakh} - ₹\,4.05\,\text{lakh}} = 1.18$$

$$\text{Combined Leverage} = \frac{\text{Sales - VC}}{\text{EBIT - Interest}} = \frac{₹\,33\,\text{lakh}}{₹\,22,95,000} = 1.44$$

Alternatively, $= \text{OL} \times \text{FL}$ $= 1.22 \times 1.18$ $= 1.44$

(v) EBIT at sales level of ₹ 50 lakh

Particulars	Amount (₹)
Sales revenue	50 Lakh
Less: Variable costs (₹ 50 lakh × 0.56)	28 Lakh
Less: Fixed costs	6 Lakh
EBIT	16 Lakh

(vi) Zero EBT implies Break-Even Sales (BESR) = FC/CV ratio, CV ratio = ₹ 33 lakh/₹ 75 lakh = 44%. BESR = (₹ 6 lakh + ₹ 4.05 lakh)/0.44 = ₹ 22,84,091.

Confirmation Table

Particulars	Amount (₹)
Sales revenue	22,84,091
Less: VC (0.56)	12,79,091
Less: FC (operating)	6,00,000
Less: Interest (additional fixed cost)	4,05,000
EBT	ZERO

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]**

Answer:

(a) To make the data turn into user friendly information, it should go through six core steps:
1. Collection of data: The collection of data may be done with standardized systems in place. Appropriate software and hardware may be used for this purpose. Appointment of trained staff also plays an important role in collecting accurate and relevant data.
2. Organising the data: The raw data needs to be organized in an appropriate manner to generate relevant information. The data may be grouped, arranged in a manner that create useful information for the target user groups.
3. Data processing: At this step, data needs to be cleaned to remove the unnecessary elements. If any data point is missing or not available, that also need to be addressed. The options available for presentation format for the data also need to be decided.
4. Integration of data: Data integration is the process of combining data from various sources into a single, unified form. This step includes creation of data network sources, a master server and users accessing the data from master server. Data integration eventually enables the analytics tools to produce effective, actionable business intelligence.
5. Data reporting: Data reporting stage involves translating the data into a consumable format to make it accessible by the users. For example, for a business firm, they should be able to provide summarized financial information e.g. revenue, net profit etc. The objective is, a user, who wants to understand the financial position of the company should get the relevant and accurate information.
6. Data utilization: At this ultimate step, data is being utilized to back corporate activities and enhance operational efficiencies and productivity for the growth of business. This makes the corporate decision making really 'data driven'.

(b) Classifying data may be a difficult and laborious procedure. Automated systems can assist in streamlining the process, but an organisation must determine the categories and criteria that will be used to classify data, understand and define its objectives, outline the roles and responsibilities of employees in maintaining proper data classification protocols, and implement security standards that correspond with data categories and tags. This procedure will give an operational framework

to workers and third parties engaged in the storage, transfer, or retrieval of data, if carried out appropriately.

Policies and procedures should be well-defined, respectful of security needs and the confidentiality of data kinds, and simple enough for staff encouraging compliance to comprehend. For example, each category should include information about the types of data included in the categorization, security concerns including rules for accessing, transferring, and keeping data, and the potential risks associated with a security policy breach.

Steps for effective data classification:

- Understanding the current setup: Taking a comprehensive look at the location of the organisation's current data and any applicable legislation is likely the best beginning point for successfully classifying data. Before one classifies data, one must know what data he is having.

- Creation of a data classification policy: Without adequate policy, maintaining compliance with data protection standards in an organisation is practically difficult. Priority number one should be the creation of a policy.

- Prioritize and organize data: Now that a data classification policy is in place, it is time to categorise the data. Based on the sensitivity and privacy of the data, the optimal method to be chosen for tagging it.