



J.K. SHAH[®]
TEST SERIES
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SUGGESTED SOLUTION

INTERMEDIATE NOVEMBER 2019 EXAM

SUBJECT- FM

Test Code – CIM 8230

BRANCH - () (Date :)

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Answer 1:**Computation of Operating and Financial Leverage**

Actual Production and Sales: 60% of 10,000 = 6,000 units

(0.5 mark)

Contribution per unit: Rs. 30 – Rs. 20 = Rs. 10

(0.5 mark)

Total Contribution: 6,000 · Rs. 10 = Rs. 60,000

(0.5 mark)

Financial Plan Situation	XY		XM	
	A	B	A	B
	Rs.	Rs.	Rs.	Rs.
Contribution (C)	60,000	60,000	60,000	60,000
Less: Fixed Cost	20,000	25,000	20,000	25,000
Operating Profit or EBIT	40,000	35,000	40,000	35,000
Less: Interest	4,800	4,800	1,200	1,200
Earnings before tax (EBT)	35,200	30,200	38,800	33,800
Operating Leverage = $\frac{C}{EBIT}$	60,000	60,000	60,000	60,000
Financial Leverage = $\frac{EBIT}{EBT}$	$\frac{40,000}{35,200} = 1.14$	$\frac{35,000}{30,200} = 1.16$	$\frac{40,000}{38,800} = 1.03$	$\frac{35,000}{33,800} = 1.04$

(8.5 marks)**Answer 2:****Working Note:****1. Calculation of Net Profit**

$$\frac{\text{Net Profit}}{\text{Capital}} = 25\%$$

$$\text{Or, } \frac{\text{Net Profit}}{\text{Rs.8,00,000}} = \frac{25}{100} \quad \text{Or, Net Profit} = \text{Rs.2,00,000}$$

(1 mark)**2. Calculation of Sales**

$$\frac{\text{Net Profit}}{\text{Sales}} = \frac{16}{100}$$

$$\text{Or, } \frac{\text{Rs.2,00,000}}{\text{Sales}} = \frac{16}{100} \quad \text{Or, Sales} = \text{Rs.12,50,000}$$

(1 mark)

3. Calculation of Gross Profit

$$\text{Gross profit} = \text{Rs. 12,50,000} \times 20\%$$

$$= \text{Rs. 2,50,000}$$

(1 mark)

4. Calculation of Opening Stock

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Average Stock}} = 5 \text{ times}$$

$$\text{Or, } \frac{\text{Rs.12,50,000} \times (1-0.2)}{\text{Average Stock}} = 5$$

$$\text{Or, Average Stock} = \frac{\text{Rs.10,00,000}}{5} = \text{Rs. 2,00,000}$$

$$\text{Average Stock} = \frac{1,50,000 + \text{Opening Stock}}{2} = 2,00,000$$

$$\text{Or, Opening Stock} = 4,00,000 - 1,50,000 = \text{Rs. 2,50,000}$$

(3 marks)

Trading and Profit & Loss Account

Particulars	Rs.	Particulars	Rs.
To Opening Stock	2,50,000	By Sales	12,50,000
To Purchases	9,00,000	By Closing Stock	1,50,000
(Balancing figure)			
To Gross Profit (Balance c/d)	2,50,000		
	14,00,000		14,00,000
To Miscellaneous expenses	50,000	By Gross Profit (Balance b/d)	2,50,000
(Balancing figure)			
To Net Profit	2,00,000		
	2,50,000		2,50,000

(4 marks)

Answer 3:**Calculation of Degree of Operating leverage and Degree of Combined leverage**

Firm	Degree of Operating Leverage (DOL)	Degree of Combined Leverage (DCL)
	$= \frac{\% \text{Change in Operating Income}}{\% \text{ change in Revenue}}$	$= \frac{\% \text{ change in EPS}}{\% \text{ change in Revenue}}$
P	$\frac{25\%}{27\%} = 0.926$	$\frac{36\%}{27\%} = 1.111$
Q	$\frac{32\%}{25\%} = 1.280$	$\frac{24\%}{25\%} = 0.960$
R	$\frac{36\%}{23\%} = 1.565$	$\frac{21\%}{23\%} = 0.913$
S	$\frac{40\%}{21\%} = 1.905$	$\frac{23\%}{21\%} = 1.095$

(10 marks)**Answer 4:****Working Notes:**

- (i) Cost of Goods Sold = Sales – Gross Profit (28% of Sales)
= Rs. 50,00,000 – Rs. 14,00,000
= Rs. 36,00,000
- (ii) Closing Stock = Cost of Goods Sold / Stock Turnover
= Rs. 36,00,000/6 = Rs. 6,00,000
- (iii) Fixed Assets = Cost of Goods Sold / Fixed Assets Turnover
= Rs. 36,00,000/1.5 = Rs. 24,00,000
- (iv) Current Assets : Current Ratio= 1.5 and Liquid Ratio = 1
Stock = 1.5 – 1 = 0.5
Current Assets = Amount of Stock × 1.5/0.5
= Rs. 6,00,000 × 1.5/ 0.5 = Rs. 18,00,000
- (v) Liquid Assets (Debtors and Cash & Cash equivalents)
= Current Assets – Stock
= Rs.18,00,000 – Rs. 6,00,000
= Rs.12,00,000

(vi) Debtors = Sales × Debtors Collection Period(days) /360 days

$$= \text{Rs.}50,00,000 \times \frac{45}{360} = \text{Rs.}6,25,000$$

(vii) Cash & Cash equivalents = Liquid Assets – Debtors

$$= \text{Rs.}12,00,000 - \text{Rs.}6,25,000 = \text{Rs.}5,75,000$$

(viii) Net worth = Fixed Assets / 1.2

$$= \text{Rs.}24,00,000 / 1.2 = \text{Rs.}20,00,000$$

(ix) Reserves and Surplus

Reserves & Surplus and Share Capital = 0.6 + 1 = 1.6

Reserves and Surplus = Rs. 20,00,000 × 0.6/1.6 = Rs. 7,50,000

(x) Share Capital

= Net worth – Reserves and Surplus

$$= \text{Rs.}20,00,000 - \text{Rs.}7,50,000$$

$$= \text{Rs.}12,50,000$$

(xi) Current Liabilities

= Current Assets / Current Ratio

$$= \text{Rs.}18,00,000 / 1.5 = \text{Rs.}12,00,000$$

(xii) Long- term Debts

Capital Gearing Ratio

= Long-term Debts / Equity Shareholders' Fund (Net worth)

Or, Long-term Debts

$$= \text{Rs.}20,00,000 \times 0.5 = \text{Rs.}10,00,000$$

(8 marks)

Balance Sheet as at 31st March, 2016

Liabilities	Amount (Rs.)	Assets		Amount (Rs.)
Equity Share Capital	12,50,000	Fixed Assets		24,00,000
Reserves and Surplus	7,50,000	Current Assets:		
Long-term Debts	10,00,000	Stock	6,00,000	
Current Liabilities	12,00,000	Debtors	6,25,000	
		Cash & Cash eq.	5,75,000	18,00,000
	42,00,000			42,00,000

(2 marks)