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SUGGESTED SOLUTION

INTERMEDIATE MAY 2019 EXAM

SUBJECT- FM

Test Code - CIM 8180

BRANCH - () (Date :)

Head Office : Shraddha, 3rd Floor, Near Chinai College, Andheri (E), Mumbai – 69.

Tel : (022) 26836666

Answer 1:

Workings:

(i) $$\frac{\text{Fixed Assets}}{\text{Total Current Assets}} = \frac{5}{7}$$

Or, Total Current Assets = $\frac{\text{Rs.40,00,000 x 7}}{5}$ =Rs.56,00,000

(ii) $$\frac{\text{Fixed Assets}}{\text{Capital}} = \frac{5}{4}$$ Or, Capital = $\frac{\text{Rs.40,00,000 x 4}}{5}$ =Rs.32,00,000

(iii) $$\frac{\text{Capital}}{\text{Total Liabilities*}} = \frac{1}{2}$$ = Or, Total liabilities = Rs. 32,00,000 × 2 = Rs. 64,00,000

*It is assumed that Total liabilities does not include capital.

(iv) $$\frac{\text{Net Profit}}{\text{Capital}} = \frac{1}{5}$$ = Or, Net Profit = Rs. 32,00,000 × 1/5 = Rs. 6,40,000

(v) $$\frac{\text{Net Profit}}{\text{Sales}} = \frac{1}{5}$$ = Or, Sales = Rs. 6,40,000 × 5 = Rs. 32,00,000

(vi) Gross Profit = 25% of Rs. 32,00,000 = Rs. 8,00,000

(vii) Stock Turnover = $\frac{\text{Cost of Goods Sold (i.e. Sales - Gross Profit}}{\text{Average Stock}} = 10$

$$= \frac{\text{Rs.32,00,000-Rs.8,00,000}}{\text{Average Stock}} =10$$

Or, Average Stock = Rs. 2,40,000 Or, $\frac{\text{Opening Stock + Rs.4,00,000}}{2}$ =Rs.2,40,000

Or, Opening Stock = Rs. 80,000 **(7 Ratios * 1 mark = 7 marks)**

Trading Account

Particulars	**(Rs.)**	**Particulars**	**(Rs.)**
To Opening Stock To Manufacturing exp./ Purchase (Balancing figure)	80,000 27,20,000	By Sales	32,00,000
To Gross Profit b/d	8,00,000	By Closing Stock	4,00,000
	36,00,000		**36,00,000**

(1 mark)

Profit and Loss Account

Particulars	(Rs.)	Particulars	(Rs.)
To Operating Expenses (Balancing figure) To Net Profit	1,60,000 6,40,000	By Gross Profit c/d	8,00,000
	8,00,000		**8,00,000**

(1 mark)

Balance Sheet

Capital and Liabilities	(Rs.)	Assets	(Rs.)
Capital Liabilities	32,00,000 64,00,000	Fixed Assets Current Assets: Closing Stock Other Current Assets (Bal. figure)	40,00,000 4,00,000 52,00,000
	96,00,000		**96,00,000**

(1 mark)

Answer 2:

Computation of Degree of Operating Leverage (DOL), Degree of Financial Leverage (DFL) and Degree of Combined Leverage (DCL).

	Firm N	Firm S	Firm D
Output (Units)	17,500	6,700	31,800
Selling Price/Unit	85	130	37
Sales Revenue (A)	14,87,500	8,71,000	11,76,600
Variable Cost/Unit	38.00	42.50	12.00
Less: Variable Cost (B)	6,65,000	2,84,750	3,81,600
Contribution (A-B)	8,22,500	5,86,250	7,95,000
Less: Fixed Cost	4,00,000	3,50,000	2,50,000
EBIT	4,22,500	2,36,250	5,45,000
Less: Interest on Loan	1,25,000	75,000	-
PBT	2,97,500	1,61,250	5,45,000
DOL = $\frac{C}{EBIT}$	$\frac{8,22,500}{4,22,500} = 1.95$	$\frac{5,86,250}{2,36,250} = 2.48$	$\frac{7,95,000}{5,45,000} = 1.46$
EFL = $\frac{EBIT}{PBT}$	$\frac{4,22,500}{2,95,500} = 1.42$	$\frac{2,36,250}{1,61,250} = 1.47$	$\frac{5,45,000}{5,45,000} = 1.00$

DCL = OL x FL OR	1.95 x 1.42 = 2.77	2.48 x 1.47 = 3.65	1.46 x 1 = 1.46
DCL = $\frac{\text{Contribution}}{PBT}$	$\frac{8,22,500}{2,97,500} = 2.76$	$\frac{5,86,250}{1,61,250} = 3.64$	$\frac{7,95,000}{5,45,000} = 1.46$

(10 marks)

Answer 3:

Statement showing the Evaluation of Debtors Policies

	Particulars	Present Policy Rs.	Proposed Policy I Rs.	Proposed Policy II Rs.
A	Expected Profit :			
	(a) Credit Sales	225.00	275.00	350.00
	(b) Total Cost other than Bad Debts:			
	Variable Costs	135.00	165.00	210.00
	(c) Bad Debts	7.50	22.50	47.50
	(d) Expected Profit [(a)-(b)-(c)]	82.50	87.50	92.50
B	Opportunity Cost of Investment in Receivables *	5.40	8.25	14.00
C	Net Benefits [A-B]	77.10	79.25	78.50

(6 marks)

Recommendation: The Proposed Policy I should be adopted since the net benefits under this policy are higher than those under other policies. **(1 mark)**

Working Note: **(3 marks)**

*** Calculation of Opportunity Cost of Average Investments**

$$\text{Opportunity Cost} = \text{Total Cost} \times \frac{\text{Collection Period}}{12} \times \frac{\text{Rate of Return}}{100}$$

Present Policy = Rs. 135 lacs x 2.4/12 x 20% = Rs. 5.40 lakhs

Proposed Policy I = Rs. 165 lacs x 3/12 x 20% = Rs. 8.25 lakhs

Proposed Policy II = Rs. 210 lacs x 4/12 x 20% = Rs. 14.00 lakhs

Answer 4:

Working Notes:

1. Manufacturing Expenses		**Rs.**
Sales		24,00,000
Less: Gross Profit Margin at 20%		4,80,000
Total Manufacturing Cost		19,20,000
Less: Materials Consumed	6,00,000	
Wages	4,80,000	10,80,000
Manufacturing Expenses		8,40,000
Less: Cash Manufacturing Expenses (50,000 × 12)		6,00,000
Depreciation		2,40,000

2. Total Cash Costs		**Rs.**
Manufacturing Costs		19,20,000
Less: Depreciation		2,40,000
Cash Manufacturing Costs		16,80,000
Add: Administrative Expenses		1,50,000
Add: Sales Promotion Expenses		75,000
Total Cash Costs		19,05,000

(4 marks)

Statement showing the Requirements of Working Capital of the Company

		Rs.
Current Assets:		
Debtors 1/6 the of Total Cash Costs (1/6 × Rs. 19,05,000) (Refer to Working Note 2)		3,17,500
Sales Promotion Expenses (prepaid)		18,750
Stock of Raw Materials (1 month)		50,000
Finished Goods (1/12 of Cash Manufacturing Costs) (Rs. 16,80,000 x 1/12) (Refer to Working Note 2)		1,40,000
Cash-in-Hand		80,000
		6,06,250
Less: Current Liabilities		
Creditors for Goods (2 months)	1,00,000	
Wages (1 month)	40,000	
Manufacturing Expenses (1 month)	50,000	
Administrative Expenses (1 month)	12,500	2,02,500
Net Working Capital		4,03,750
Add: Safety Margin @ 10%		40,375
Working Capital Required		4,44,125

(6 marks)

Answer 5:

1. Dividend yield on Ordinary shares:

Dividend per share = 20% of paid-up value.
= Rs.20

therefore, Dividend yield = (DPS/Market Price) x 100
= (.20/4) x 100 = 5%

2. Cover for Preference and Equity Dividends:

(a) Pref. Div. cover = PAT/Pref. Div.
= Rs. 5,42,00/42,000 = 12.9 times

(b) Eq.Div. cover = (PAT-Pref. Div.)/Equity Dividend
= Rs.5,00,000/3,20,000 = 1.56 times

3. Earning Yield = EPS/Market Price

= (Rs.5,00,00/Rs.16,00,000) / Rs.4

= 7.8%

4. Price/Earnings Ratio = Market price/EPS

= Rs.4/.31 =12.9

5. Net Cash Flow:

Profit after Tax	5,42,000
+ Depreciation	1,20,000
- Dividends on Pref. Shares	42,000
- Dividend on Equity shares	3,20,000
Net Cash Flow	3,00,000

(5 Ratios * 2 marks = 10 marks)