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SUGGESTED SOLUTION

CA INTERMEDIATE

SUBJECT- F.M.

Test Code – CIM 8443

BRANCH - () (Date :)

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ANSWER - 1

A. Statement showing the Evaluation of Debtors Policies (Total Approach)

Particulars	Present Policy (30 days) Rs.	Proposed Policy I (40 days) Rs.	Proposed Policy II (60 days) Rs.	Proposed Policy III (75 days) Rs.
A. Expected Profit :				
(a) Credit Sales	4,20,000	4,41,000	4,72,500	4,83,000
(b) Total Cost (other than Bad Debts				
(i) Variable Costs [Sales x Rs.2/Rs.3]	2,80,000	2,94,000	3,15,000	3,22,000
(ii) Fixed Costs (W.N.1)	35,000	35,000	35,000	35,000
Total Cost (Variable Cost + Fixed Cost)	3,15,000	3,29,000	3,50,000	3,57,000
(c) Bad Debts	4,200 (1% of 4,20,000)	6,615 (1.5% of 4,41,000)	14,175 (3% of 4,72,500)	19,320 (4% of 4,83,000)
(d) Expected Profit [(a) – (b) – (c)]	1,00,800	1,05,385	1,08,325	1,06,680
B. Opportunity Cost of Investments in Receivables *	5,250 $\left(\frac{3,15,000}{\frac{30}{360}} \times \frac{20}{100}\right)$	7,311 $\left(\frac{3,29,000}{\frac{40}{360}} \times \frac{20}{100}\right)$	-11,667 $\left(\frac{3,50,000}{\frac{60}{360}} \times \frac{20}{100}\right)$	14,875 $\left(\frac{3,57,000}{\frac{75}{360}} \times \frac{20}{100}\right)$
C. Net Benefits (A-B)	95,550	98,074	96,658	91,805

Recommendation: The Proposed Policy I (i.e. increase in collection period by 10 days or total 40 days) should be adopted since the net benefits under this policy are higher as compared to other policies.

(8 MARKS)

Working Note- 1:

(i) Calculation of Fixed Cost

= [Average Cost per unit – Variable Cost per unit] × No. of Units sold

= [(2.25 – 2) × (Rs. 4, 20,000/3)]= Rs. 35,000

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

$$\text{Opportunity Cost} = \text{Total Cost} \times \frac{\text{Collection period}}{360 \text{ days}} \text{ x } \frac{\text{Rate of return}}{100}$$

(2 MARKS)

ANSWER - 2

Working Notes:

1. **Raw material inventory:** The cost of materials for the whole year is 60% of the Sales value.

$$= \frac{54{,}000 \text{ units x } (60\% \text{ of Rs.}200)}{12 \text{ months}} \text{ x 2 months} = \text{Rs.}10{,}80{,}000$$

2. Work-in-process: (Each unit of production is expected to be in process for one month):

	(Rs.)
(a) Raw materials in work-in-process (being one month's raw material requirements)	5,40,000
(b) Labour costs in work-in-process $\left(\frac{54{,}000 \text{ units x } (10\% \text{ of Rs.}200)}{12 \text{ months}}\right)$ x 0.5	45,000
(c) Overheads $\left(\frac{54{,}000 \text{ units x } (20\% \text{ of Rs.}200)}{12 \text{ months}}\right)$ x 0.5	90,000
	6,75,000

3. Finished goods inventory: $\frac{54{,}000 \text{ units x } (90\% \text{ of Rs.}200)}{12 \text{ months}}$ x 1 month = Rs.8,10,000

4. Receivables: $\frac{54{,}000 \text{ units x } (90\% \text{ of Rs.}200)}{12 \text{ months}}$ x 1.5 months = Rs.12,15,000

5. Payable to suppliers: $\frac{54{,}000 \text{ units x } (60\% \text{ of Rs.}200)}{12 \text{ months}}$ x 1 month = Rs.5,40,000

6. Direct Wages payable: $\frac{54{,}000 \text{ units x } (10\% \text{ of Rs.}200)}{12 \text{ months}}$ x 1 month = Rs.90,000

(6*1 = 6 MARKS)

Calculation of Working Capital Requirement

		(Rs.)	**(Rs.)**
A.	Current Assets		
(i)	Inventories:		
	- Raw Materials	10,80,000	
	- Work-in-process	6,75,000	
	- Finished goods	8,10,000	25,65,000
(ii)	Receivables		12,15,000
(iii)	Cash in hand (40% of Rs.6,30,000)		2,52,000
	Total Current Assets		**40,32,000**
B.	Current Liabilities:		
(i)	Payables for raw materials		5,40,000
(ii)	Direct wages payables		90,000
			6,30,000
	Net Working Capital (A – B)		34,02,000
Add:	Safety margin (15% of Net Working Capital)		5,10,300

Working capital requirement		39,12,300

(4 MARKS)

ANSWER - 3

1. Weekly Collection Pattern

- Since Annual Sales = Rs. 8,400 Lakhs, Weekly Sales = $\frac{\text{Rs.8,400 Lakhs}}{50 \text{ weeks}}$ = 168 lakhs.
- Collection Pattern of weekly sales is as under -

Day	Mon	Tue	Wed	Thu	Fri	Total
Proportion of Collection	2	2	1	1	1	7
Sales Collection apportioned (Rs. Lakhs)	48.00	48.00	24.00	24.00	24.00	168.00

(2 MARKS)

2. Computation of Interest Cost of Tuesday and Friday Banking

Collection Day	Collection Amount	Deposit Day	Delay Days	Interest Cost per week
Mon	Rs. 48,00,000	Tue	1	Rs. 48,00,000 x $\frac{1}{360}$ x 15% =2,000
Tue	Rs. 48,00,000	Tue	0	Rs. 48,00,000 x $\frac{0}{360}$ x 15% =-
Wed	Rs. 24,00,000	Fri	2	Rs. 24,00,000 x $\frac{2}{360}$ x 15% =2,000
Thu	Rs. 24,00,000	Fri	1	Rs. 24,00,000 x $\frac{1}{360}$ x 15% =1,000
Fri	Rs. 24,00,000	Fri	0	Rs. 24,00,000 x $\frac{1}{360}$ x 15% = -
	Total			**5,000**

Note: In case of daily banking, there is no delay in remittance, and hence no Interest Cost.

(5 MARKS)

3. Cost Comparison of different banking options

Particulars	Daily Banking	Tuesday & Friday Banking
Interest Cost per week	Nil	Rs. 5,000
Operating Cost per week	5 visits x Rs. 2,500 = Rs. 12,500	2 visits x Rs. 2,500 = Rs. 5,000
Total Costs per week	Rs. 12,500	Rs. 1O,OOO

Decision: Since Total Cost per week is lower in "Tuesday and Friday Banking" Option, it may be preferred.

(3 MARKS)

ANSWER - 4

ANSWER - A

Calculation of operating cycle

Period of raw material stage	$\frac{2,00,000}{10,000}$	= 20 days
Period of work-in-progress stage	$\frac{3,00,000}{12,500}$	= 24 days
Period of finished goods stage	$\frac{1,80,000}{18,000}$	= 10 days
Period of Accounts receivable stage	$\frac{3,00,000}{20,000}$	= 15 days
Period of Accounts payable stage	$\frac{1,80,000}{10,000}$	= 18 days

Duration of operating cycle = (20 + 24 + 10 + 15) - 18 =51 days

(5*1 = 5 MARKS)

ANSWER - B

Expected Profit for Sale (20,00,000 ÷200) X 30		Rs. 3,00,000
Less : Incremental cost		35,000
Incremental Profit		2,65,000
Quarterly Sales (Rs. 20,00,000 ÷ 4)		Rs. 5,00,000
Cost of quarterly sales is (5,00,000 ÷ 200) X 170		4,25,000
Cost of Credit availed by Sug Ltd :		**Product per Quarter**
15% of Rs. 4,25,000	Rs. 63,750 X 20 days	Rs. 12,75,000
30% of Rs. 4,25,000	1,27,500 X 45 days	57,37,500
25% of Rs. 4,25,000	1,06,250 X 90 days	95,62,500
28% of Rs. 4,25,000	1,19,000 X 100 days	Rs. 1,19,00,000
2% of Rs. 4,25,000	(Non-recovery)	-
Total Funds blocked for 1 day		2,84,75,000
Interest @ 25% for 1 day for 1 Quarter		Rs. 19,503
Interest for 4 quarters		78,012

Cost of Bad Debts (5,00,000 X 2% X 4)	40,000
Total cost (Interest + Bad Debt)	1,18,012
Incremental Profit	2,65,000
Net Profit (2,65,000 - 1,18,012)	1,46,988

The firm should accept the offer.

(7 MARKS)

ANSWER - C

CASH BUDGET FOR JANUARY-MAY, 2010

(Figures in Rs.)

	January	**February**	**March**	**April**	**May**
Opening balance	50,000	94,100	1,05,500	48,100	65,100
Cash inflows:					
Sales Cash	32,000	40,000	32,000	40,000	36,000
Credit	1,28,000	1,12,000	1,28,000	1,60,000	1,28,000
Total cash (A)	2,10,000	2,46,100	2,65,500	2,48,100	2,29,100
Outflows:					
Creditors	96,000	84,000	96,000	1,20,000	96,000
Variable expenses	7,500	9,000	9,000	9,000	9,500
5% Commission	6,400	5,600	6,400	8,000	6,400
Rent	6,000	6,000	6,000	6,000	6,000
Fixed assets	—	36,000	1,00,000	—	—
Taxes	—	—	—	40,000	—
Total cash outflows (B)	1,15,900	1,40,600	2,17,400	1,83,000	1,17,900
Balance (A-B)	94,100	1,05,500	48,100	65,100	1,11,200

The outflows on account of Variable expenses have been calculated as follows: The Variable expenses are payable with a time lag of half a month. So, during the month of January2010, payment would be made in respect of half month sales of January 2010 and half month sales of December 2009. So, payment would be 5% of [1 /2(1,40,000)+1 /2 (1,60,000)]. Similarly, payment for other months can also be calculated.

(8 MARKS)