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SUGGESTED SOLUTION

CA INTERMEDIATE NOV'19

SUBJECT- COSTING & F.M.

Test Code – CIM 8286

BRANCH - () (Date :)

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

Tel : (022) 26836666

ANSWER-1

Cost sheet for the year ended 31st March, 2018.

Units produced – 14,000 units

Unit sold – 14,153 units

Particulars	Amount (Rs.)
Raw material purchased	42,25,000
Add : Freight Inward	1,00,000
Add : Opening value of raw material	2,28,000
Less : Closing value of raw materials	(3,05,000)
	42,48,000
Less : Sale of scrap of material	8,000
Material consumed	42,40,000
Direct Wages (12,56,000 + 1,50,000)	14,06,000
Prime Cost	56,46,000
Factory overheads (20% of Rs. Prime Cost)	11,29,200
Add : Opening value of W – I – P	1,92,500
Less : Closing value of W – I – P	(1,40,700)
Factory Cost	68,27,000
Add : Administrative overheads	1,73,000
Cost of Production	70,00,000
Add : Value of opening finished stock	6,08,500
Less : Value of closing finished stock	
[Rs. 500(70,00,000/14,000) × 1,064)	
(1,217 + 14,000 – 14,153 = 1,064 units)	(5,32,000)
Cost of Goods Sold	70,76,500
Distribution expenses (Rs. 16 × 14,153 units)	2,26,448
Cost of Sales	73,02,948
Profit (Balancing figure)	14,43,606
Sales (Rs. 618 × 14,153 units)	87,46,554

(10 marks)

ANSWER-2

Statement of Working Capital Requirement for PQ Ltd

		Rs.	Rs.
A.	**Current Assets**		
(i)	Inventories :		
	Material (1 Month) $\left(\frac{\text{Rs.45,00,000}}{\text{12 months}} \text{x 1 month}\right)$	3,75,000	

	Finished goods (1 Month) $\left(\frac{\text{Rs.}1,35,00,000}{12\text{ months}} \text{ x } 1\text{ month}\right)$	11,25,000	15,00,000
(ii)	Receivables (Debtors)		
	For Domestic Sales $\left(\frac{\text{Rs.}90,00,000}{12\text{ months}} \text{ x } 1\text{ month}\right)$	7,50,000	
	For Export Sales $\left(\frac{\text{Rs.}45,00,000}{12\text{ months}} \text{ x } 3\text{ months}\right)$	11,25,000	18,75,000
(iii)	Cash in hand and at bank (Rs.10,00,000 – Rs.5,00,000)		5,00,000
	Total Current Assets		38,75,000
B.	**Current Liabilities :**		
(i)	Payables (Creditors) for materials (2 months) $\left(\frac{\text{Rs.}45,00,000}{12\text{ months}} \text{ x } 2\text{ months}\right)$		7,50,000
(ii)	Outstanding wages (0.5 months) $\left(\frac{\text{Rs.}36,00,000}{12\text{ months}} \text{ x } 0.5\text{ month}\right)$		1,50,000
(iii)	Outstanding manufacturing expenses $\left(\frac{\text{Rs.}54,00,000}{12\text{ months}} \text{ x } 1\text{ month}\right)$		4,50,000
(iv)	Outstanding administrative expenses $\left(\frac{\text{Rs.}12,00,000}{12\text{ months}} \text{ x } 1\text{ month}\right)$		1,00,000
(v)	Income tax payable (Rs.15,00,000 ÷ 4)		3,75,000
	Total Current Liabilities		18,25,000
	Net Working Capital (A-B)		20,50,000
	Add : 15% contingency margin		3,07,500
	Total Working Capital required		23,57,500

(5 MARKS)

Working Note: **(5 MARKS)**

1. Calculation of Cost of Goods Sold and Cost of Sales

	Domestic (Rs.)	**Export (Rs.)**	**Total (Rs.)**
Sales	1,20,00,000	54,00,000	1,74,00,000
Less: Gross profit @ 25% on domestic sales and 16.67% on export sales (Working note-2)	(30,00,000)	(9,00,000)	(39,00,000)
Cost of Goods Sold/ Cash Cost of Sales	90,00,000	45,00,000	1,35,00,000

2. Calculation of gross profit on Export Sales:

Let domestic selling price is Rs.100. Gross profit is Rs.25, and then cost per unit is Rs.75

Export price is 10% less than the domestic price i.e. Rs.100 – (1- 0.1) = Rs.90

Now gross profit will be Rs.90 - Rs.75 = Rs.15

Therefore, Gross profit at domestic price will be $\frac{\text{Rs.}15}{\text{Rs.}100}$ x 100 = 15%

Or, gross profit at export price will be $\frac{\text{Rs.}15}{\text{Rs.}90}$ x 100 = 16.67%

Assumptions

(i) It is assumed that administrative expenses relating to production activities.

(ii) Value of opening and closing stocks are equal.

(iii) Receivables are calculated based on cost of goods sold

ANSWER-3

CASH BUDGET FOR THE PERIOD JULY-DECEMBER 2010

(Figures in Rs. lacs)

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cash in the beginning	5	7	7	7 .	7.	7
Cash Inflows : Cash Sales	8	8	10	10	12	13
Debtors Collection	30	32	36	40	44	50
Interest Received	-	-	2	-	-	2
Sale of fixed assets	-	20	-	-	-	-
Total cash (A)	43	67	55	57	63	72
Cash Outflows : Purchases	14	16	17	20	20	25
Expenses	5	6	6	6	7	7
Wages and Salaries	13	14	16	18	19	21
Total Outflows (B)	32	36	39	44	46	53
Balance at the end (A-B)	11	31	16	13	17	19 I
Investment in Government Securities	4	24	9	6	10	12
Closing Balance	7	7	7	7	7	7

(5 MARKS)

Working Notes: **(5 MARKS)**

1. Cash collected from debtors has been calculated follows :

(Figures in Rs.)

	June	**July**	**Aug.**	**Sept.**	**Oct.**	**Nov.**
Credit sales Cash collected	28	32	32	40	40	48
(Previous Month) Cash collected	-	14	16	16	20	20
(Current Month)	-	1,6	16	20	20	24
Total cash collected	-	30	32	36	40	44

2. Cash balance in excess of Rs. 7,00,000 has been invested in Government Securities. No borrowing is required in any of these month as the cash balance is more than the minimum cash requirement.

3. Since wages and salaries are payable with a time lag of 15 days, therefore, in a particular month the amount of wages and salaries payable would be the sum of wages and salaries of the 2nd half of the previous month and the 1st half of the current month.

ANSWER-4

Calculation of Cost of Production of Arnav Metalic for the period …..

Particulars	**Amount (Rs.)**
Raw materials purchased	64,00,000
Add : Opening stock	2,88,000
Less : Closing stock	(4,46,000)
Material consumed	62,42,000
Wages paid	23,20,000
Prime cost	85,62,000
Repair and maintenance cost of plant & machinery	9,80,500
Insurance premium paid for inventories	26,000
Insurance premium paid for plant & machinery	96,000
Quality control cost	86,000
Research & development cost	92,600
Administrative overheads related with factory and production	9,00,000
	1,07,43,100
Add : Opening value of W – I – P	4,06,000
Less : Closing value of W – I – P	(6,02,100)
	1,05,47,000
Less : Amount realised by selling scrap	(9,200)
Add : Primary packing cost	10,200
Cost of Production	1,05,48,000

(10 marks)

Notes :

(i) Other administrative overhead does not form part of cost of production.

(ii) Salary paid to Director (Technical) is an administrative cost.

ANSWER-5

Working Notes:

(i)	Cost of Goods Sold	= Sales – Gross Profit (= 25% of Sales)
		= Rs. 30,00,000 – Rs. 7,50,000
		= Rs. 22,50,000
(ii)	Closing Stock	= Cost of Goods Sold / Stock Turnover
		= Rs. 22,50,000/6 = Rs. 3,75,000
(iii)	Fixed Assets	= Cost of Goods Sold / Fixed Assets Turnover
		= Rs. 22,50,000/1.5
		= Rs. 15,00,000
(iv)	Current Assets : Current Ratio	= 1.5 and Liquid Ratio = 1
	Stock = 1.5 – 1	= 0.5
	Current Assets	= Amount of Stock x 1.5/0.5
		= Rs. 3,75,000 x 1.5/0.5 = Rs. 11,25,000
(v)	Liquid Assets (Debtors and Cash)	= Current Assets – Stock
		= Rs. 11,25,000 – Rs. 3,75,000
		= Rs. 7,50,000
(vi)	Debtors	= Sales x Debtors Collection period /12
		= Rs. 30,00,000 x 2 /12
		= Rs. 5,00,000
(vii)	Cash	= Liquid Assets – Debtors
		= Rs. 7,50,000 – Rs. 5,00,000 = Rs. 2,50,000

(viii)	Net worth	= Fixed Assets /1.2
		= Rs. 15,00,000/1.2 = Rs. 12,50,000
(ix)	Reserves and Surplus	
	Reserves and Share Capital	= 0.6 + 1 = 1.6
	Reserves and Surplus	= Rs. 12,50,000 x 0.6/1.6
		= Rs. 4,68,750
(x)	Share Capital	= Net worth – Reserves and Surplus
		= Rs. 12,50,000 – Rs. 4,68,750
		= Rs. 7,81,250
(xi)	Current Liabilities	= Current Assets/ Current Ratio
		= Rs. 11,25,000/1.5 = Rs. 7,50,000
(xii)	Long-term Debts	
	Capital Gearing Ratio	= Long-term Debts / Equity Shareholders' Fund
	Long-term Debts	= Rs. 12,50,000 x 0.5 = Rs. 6,25,000

(0.5 mark x 12 = 6 marks)

(a) Preparation of Balance Sheet of a Company

Balance Sheet

Liabilities	**Amount (Rs.)**	**Assets**	**Amount (Rs.)**
Equity Share Capital	7,81,250	Fixed Assets	15,00,000
Reserves and Surplus	4,68,750	Current Assets	
Long-term Debts	6,25,000	Stock	3,75,000
Current Liabilities	7,50,000	Debtors	5,00,000
		Cash	2,50,000
	26,25,000		**26,25,000**

(2 marks)

(b) Statement Showing Working Capital Requirement

		Rs.
A.	**Current Assets**	
	(i) Stocks	3,75,000
	(ii) Receivables (Debtors) (Rs.5,00,000 ÷ 1.25)	4,00,000
	(iii) Cash in hand and at bank	2,50,000
	Total Current Assets	10,25,000
B.	**Current Liabilities**	

	Total Current Liabilities	7,50,000
	Net Working Capital (A-B)	2,75,000
Add.	Provision for contingencies (1/9th of Net Working Capital)	30,556
	Working Capital requirement	3,05,556

(2 marks)