



J.K. SHAH[®]
TEST SERIES
Evaluate Learn Succeed

SUGGESTED SOLUTION

CA INTERMEDIATE NOV'19

SUBJECT- COSTING

Test Code - CIM 8318

BRANCH - () (Date :)

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

Tel : (022) 26836666

Answer 1:**Process – P Account**

Particulars	Kg.	Amt. (Rs.)	Particulars	Kg.	Amt. (Rs.)
To Input	10,000	50,000	By Normal wastage	1,000	1,000
			(1,000 kg. × Rs. 1)		
To Direct Material	----	38,000	By Process – Q (9,000 kg. × Rs. 15.50)	9,000	1,39,500
To Direct Labour	----	30,000			
To Production OH (Rs. 90,000 × 3/12)	----	22,500			
	10,000	1,40,500		10,000	1,40,500

(2 marks)

$$\text{Cost per unit} = \frac{\text{Rs. } 1,40,500 - \text{Rs. } 1,000}{10,000 \text{ kg.} - 1,000 \text{ kg.}} = \text{Rs. } 15.50$$

(1 mark)**Process - Q Account**

Particulars	Kg.	Amt. (Rs.)	Particulars	Kg.	Amt.(Rs.)
To Process – P A/c.	9,000	1,39,500	By Normal wastage	900	900
			(900 kg. × Rs. 1)		
To Direct Material	----	42,500	By Process – Q	8,200	2,54,200
To Direct Labour	----	40,000	(8,200 kg. Rs. 31)		
To Production OH					
(Rs. 90,000 × 4 /12)	---	30,000			
To Abnormal Gain	100	3,100			
(100 kg. × Rs. 31)					
	9,100	2,55,100		9,100	2,55,100

(2 marks)

$$\text{Cost per unit} = \frac{\text{Rs. } 2,52,000 - \text{Rs. } 900}{9,000 \text{ kg.} - 900 \text{ kg.}} = \text{Rs. } 31$$

(1 mark)**Process – R Account**

Particulars	Kg.	Amount	Particulars	Kg.	Amount
To Process – Q A/c.	8,200	2,54,200	By Normal wastage	820	820
To Direct Material	---	42,880	By Abnormal loss	80	4,160
To Direct Labour	---	50,000	By Finished Goods	7,300	3,79,600
To Production OH (Rs. 90,000 × 5/12)	----	37,500	(7,300 kg. × Rs. 52)		
	8,200	3,84,580		8,200	3,84,580

(2 marks)

$$\text{Cost per unit} = \frac{\text{Rs. } 3,84,580 - \text{Rs. } 820}{8,200 \text{ kg.} - 820 \text{ Kg.}} = \text{Rs. } 52$$

(1 mark)

Calculation of Selling price per unit of end product :	
Cost per unit	Rs. 52.00
Add : Profit 25% on selling price i.e. 1/3 rd of cost	Rs. 17.33
Selling price per unit	Rs. 69.33

(1 mark)

Answer 2:

- (i) **Statement of profitability of the Oil Mill (After carrying out further processing) for the quarter ending 31st March 20X8.**

Products	Sales Value after further processing	Share of Joint Cost	Additional processing cost	Total Cost after processing	Profit (loss)
ACH	1,72,500	98,667	43,000	1,41,667	30,833
BCH	15,000	19,733	9,000	28,733	(13,733)
CSH	6,000	4,933	--	4,933	1,067
DSH	45,000	24,667	1,500	26,167	18,833
	2,38,500	1,48,000	53,500	2,01,500	37,000

(4 marks)

- (ii) **Statement of profitability at the split off point**

Product	Selling price of split off	Output in units	Sales value at split off point	Share of joint cost	Profit at split off point
ACH	15.00	8,000	1,20,000	98,667	21,333
BCH	6.00	4,000	24,000	19,733	4,267
CSH	3.00	2,000	6,000	4,933	1,067
DSH	7.50	4,000	30,000	24,667	5,333
			1,80,000	1,48,000	32,000

Note : Share of Joint Cost has been arrived at by considering the sales value at split off point.

(4 marks)

Answer 3:

(i) Re - order quantity = $\sqrt{\frac{2AO}{C \times i}}$

$$= \sqrt{\frac{2 \times 7500 \times 12 \times 500}{60 \times 10}}$$

$$= 3,873 \text{ units}$$

- (ii) Re-order level

= Maximum re-order period X Maximum usage

= 8 weeks X 750 units per week

= 6,000 units

(iii) Minimum stock level

$$= \text{Re-order level} - \{\text{Normal usage} \times \text{Average reorder period}\}$$

$$= 6,000 - (500 \times 6.5)$$

$$= 2,750 \text{ units}$$

(iv) Maximum stock level

$$= \text{Re-order level} + \text{Re-order quantity} - (\text{Minimum usage} \times \text{Minimum re-order period})$$

$$= 6,000 + 3,873 - (5 \times 250)$$

$$= 8,623 \text{ units}$$

(v) Average stock level

$$= \frac{1}{2} (\text{Minimum stock level} + \text{Maximum stock level})$$

$$= \frac{1}{2} (2,750 + 8,623)$$

$$= 5,687 \text{ units}$$

(2 marks x 5 = 10 marks)

Answer 4:

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 5:

Material M	Material N
Turnover ratio	Turnover ratio
$= \frac{\text{Cost of Stock of raw material consumed}}{\text{Average stock of raw material}}$ $= \frac{\text{Rs.6,00,000} + \text{Rs.9,50,000} - \text{Rs.4,50,000}}{(6,00,000 + 4,50,000)/2} = 2.09$	$= \frac{\text{Cost of stock of raw material consumed}}{\text{Average stock of raw material}}$ $= \frac{\text{Rs.10,00,000} + \text{Rs.18,40,000} - \text{Rs.7,25,000}}{(10,00,000 + 7,25,000)/2} = 2.45$
Average number of days for which the average inventory is held	Average number of days for which the average inventory is held
$= \frac{360 \text{ days}}{2.09}$ $= 172.25 \text{ days}$	$= \frac{360 \text{ days}}{2.45}$ $= 146.94 \text{ days}$

(3 marks)

(ii) Advice

Comparatively Material M is slower than Material N since Inventory holding period of 'M' is 172.25 days in Comparison to 'N' i.e. 146.94 days. Infact, both materials have slow inventory turnover. Though, different business has their own expected rates for inventory turnover like food shops have fast inventory turnover, shop selling furniture etc. will have slower inventory turnover while manufacturers of large items of plant will have very long inventory turnover.

If it is not as per the Industry Standard, then a slow turnover may indicate that excessive inventory is held and risk of obsolete or spoiled inventory will increase. Large quantity of slow moving material means that capital is locked up in business and not earning revenue. It is advisable to make proper investigations into slow moving materials and take steps to minimize the loss arises therefrom as it may impact overall financial health of the organization.

(2 marks)

Answer 6:

(A)

Objectives of system of material control

The objectives of a system of material control are the following:

- (i) **Minimising interruption in production process** : Ensuring that no activity, particularly production, suffers from interruption for want of materials and stores. It should be

noted that this requires constant availability of every item that may be needed howsoever small its cost may be.

- (ii) **Optimisation of Material Cost :** Seeing to it that all the materials and stores are acquired at the lowest possible price considering the quality that is required and considering other relevant factors like reliability in respect of delivery, etc. Holding cost should also require to be minimized.
- (iii) **Reduction in Wastages:** Avoidance of unnecessary losses and wastages that may arise from deterioration in quality due to defective or long storage or from obsolescence. It may be noted that losses and wastages in the process of manufacture, concern the production department.
- (iv) **Adequate Information:** Maintenance of proper records to ensure that reliable information is available for all items of materials and stores that not only helps in detecting losses and pilferages but also facilitates proper production planning.
- (v) **Completion of order in time:** Proper material management is very necessary for fulfilling orders of the firm. This adds to the goodwill of the firm. **(5 marks)**

(B)

Direct Expenses: Expenses other than direct material cost and direct employee cost, which are incurred to manufacture a product or for provision of service and can be directly traced in an economically feasible manner to a cost object. **(1 mark)**

The following costs are examples for direct expenses:

- (a) Royalty paid/ payable for production or provision of service;
- (b) Hire charges paid for hiring specific equipment;
- (c) Cost for product/ service specific design or drawing;
- (d) Cost of product/ service specific software;
- (e) Other expenses which are directly related with the production of goods or provision of service. **(1 mark)**