

Process Costing

Questions:

- Q.1** M J Pvt. Produces a product “SKY” which passes through two processes, viz .Process- A and Process-B. The details for the year ending 31st March, 2014 are as follows:

	Process- A	Process-B
40,000 Units introduced at a cost of	Rs. 3,60,000	-
Material Consumed	Rs. 2,42,000	Rs. 2,25,000
Direct Wages	Rs. 2,58,000	Rs. 1,90,000
Manufacturing Expenses	Rs. 1,96,000	Rs. 1,23,720
Output in Units	37,000	27,000
Normal Wastage of Input	5%	10%
Scrap Value(per unit)	Rs. 15	Rs. 20
Selling Price (per unit)	Rs. 37	Rs. 61

Additional Information:

- 80% of the output of Process – A, was passed on the next process and the balance was sold. The entire output of Process – B was sold.
- Indirect expenses for the year was Rs. 4, 48,080.
- It is assumed that Process-A and Process-B are not responsibility center.

Required:

- Prepare Process-A and Process-B Account.
- Prepare Profit & Loss Account showing the net profit/net loss for the year.

- Q.2** Following data are available for a product for the month of July, 1993:

	Process I	Process II
Opening Work-in-progress	NIL	NIL
	Rs.	Rs.
Costs incurred during the month:		
Direct materials	60,000	-
Labour	12,000	16,000
Factory Overheads	24,000	20,000
Units of Production		
Received in Process	40,000	36,000
Completed and transferred	36,000	32,000
Closing work-in-progress	2,000	?

Normal loss in process	2,000	1,500
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Production remaining in Process to be valued as follows:

Martials	100%
Labour	50%
Overheads	50%

There has been no abnormal loss in Process II.

Prepare Process accounts after working out the missing figures and with detailed workings.

Answer:

Q.1 Ans.

Process – A A/c

	Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
Cost per unit	To Input	40,000	3,60,000	By Normal wastage (2,000 units × Rs.15)	2,000	30,000
	To Material	---	2,42,000	By Abnormal loss A/c (1,000 units × Rs. 27)	1,000	27,000
	To Direct Wages	---	2,58,000	By Process – B (29,600 Units × Rs. 27)	29,600	7,99,200
	To Manufacturing Exp.	---	1,96,000	By Profit & Loss A/c (7,400 units × Rs. 27)	7,400	1,99,800
	Total	40,000	10,56,000		40,000	10,56,000

Rs. 27 per unit

Normal wastage = 40,000 units × 5 % = 2,000 units

Abnormal loss = 40,000 units – (37,000 units + 2,000 units)
= 1,000 units

Transfer to Process – B = 37,000 Units × 80% = 29,600 units

Sale = 37,000 units × 20% = 7,400 units

Process B A/c

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Process – A A/c	29,600	7,99,200	By Normal wastage (2,960 units × Rs. 20)	2,960	59,200
To Material	---	2,25,000	By Profit & Loss A/c (27,000 units × Rs. 48)	27,000	12,96,000
To Direct Wages	---	1,90,000			
To Manufacturing Exp.	---	1,23,720			
To Abnormal Gain A/c (360 unit × Rs. 48)	360	17,280			
	29,960	13,55,200		29,960	13,55,200

$$\text{Cost per unit} = \frac{\text{Rs.13,37,920} - \text{Rs.59,200}}{\text{Rs.29,600 Units} - 2,960 \text{ Units}} = \text{Rs.48 per unit}$$

$$\text{Normal Wastage} = 29,600 \text{ units} \times 10 \% = 2,960 \text{ units}$$

$$\begin{aligned} \text{Abnormal gain} &= (27,000 \text{ Units} + 2,960 \text{ units}) - 29,600 \text{ units} \\ &= 360 \text{ units} \end{aligned}$$

(ii) Profit & Loss A/c

Particular	Amount (Rs.)	Particular	Amount (Rs.)
To Process – A A/c	1,99,800	By Sales :	
To Process – B A/c	12,96,000	- Process – A	2,73,800
To Abnormal loss A/c	12,000	(7,400 units × Rs. 37)	
To indirect Expenses	4,48,080	- Process – B	16,47,000
		(27,000 units × Rs. 61)	
		By Abnormal gain	10,080
		By Net loss	25,000
	19,55,880		19,55,880

Working Notes:

Normal Wastage (Loss) A/c

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Process – A A/c	2,000	30,000	By Abnormal Gain A/c (360 units × Rs. 20)	360	7,200
To Process - B A/c	2,960	59,200	By Bank (Sales)	4,600	82,000

	4,960	89,200		4,960	89,200
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Abnormal Loss A/c

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Process – A A/c	1,000	27,000	By Bank A/c (1,000 units × Rs. 15)	1,000	15,000
			By Profit & Loss A/c	---	12,000
	1,000	27,000		1,000	27,000

Abnormal Gain A/c

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Normal loss A/c (360 units × Rs. 20)	360	7,200	By Process – B A/c	360	17,280
To Profit & Loss A/c		10,080			
	360	17,280		360	17,280

Q.2 Ans

Process 1 A/c

Statement of Equivalent production

Input	Units	Output	Units	Material % of completion	Units	Labour & Overhead	
						% of completion	Units
Introduced	40,000	Finished & transferred to Pr.II	36,000	100%	36,000	100%	36,000
		Normal loss	2,000	-	-	-	-
		Closing WIP	2,000	100%	2,000	50%	1,000
	40,000		40,000		38,000		37,000

Statement of Cost/ Equivalent Unit Elements of Cost

Particulars	Materials	Labour	Overhead
Cost incurred during the month (a)	60,000	12,000	24,000
Equivalent units of production (b)	38,000	37,000	37,000
Cost/ Equivalent unit (a/b)	1.5789	0.3243	0.6486

Statement of Evaluation

Items	Elements of costs	Equivalent unit	Rate	Amount	Total Amount
Finished & transferred to Pr.II	Materials	36,000	1.5789	56,842	91,869
	Labour	36,000	0.3243	11,676	
	Overheads	36,000	0.6486	23,351	
Closing WIP	Materials	2,000	1.5789	3,158	4,131
	Labour	1,000	0.3243	324	
	Overheads	1,000	0.6486	649	
					96,000

Process- I A/c

	Units	Rate	Amt.		Unit	Rate	Amt.
To Direct materials	40,000	1.5	60,000	By Normal Loss	2,000	-	-
To Labour	-	-	12,000	By Process II A/c	36,000	2.55	91,869
To Factory O/h	-	-	24,000	By Closing WIP	2,000	2.07	4,131
	40,000		96,000		40,000		96,000

Process –II A/c

Input	Units	Output	Units	Materials		Labour & Overheads	
				% of completion	Units	% of completion	Units
Transferred From Pr.I	36,000	Finished & transferred	32,000	100%	32,000	100%	32,000
		Normal Loss	1,500	-	-	-	-
		Closing WIP	2,500	100%	2,500	50%	1,250
	36,000		36,000		34,500		33,250

Statement of Cost per Equivalent Unit

Particulars	Materials	Labour	Overhead
Cost incurred during the month & transferred from Pr.I (a)	91,869	16,000	20,000
Equivalent units of production (b)	34,500	33,250	33,250
Cost/ Equivalent unit (a/b)	2.663	0.481	0.602

Statement of Evaluation

Process – II
A/c

Items	Element of cost			Equivalent Unit	Rate	Amt.	Total Amount	
Units introduced & transferred from Pr.I	Materials			32,000	2.663	85,210	1,19,859	
	Labour			32,000	0.481	15,392		
	Overheads			32,000	0.602	19,257		
Closing WIP	Materials			2,500	0.663	6,658		
	Unit	Labour	Rate	Amt	Unit	Rate	Amt.	
To Process I A/c		Overheads		1,250	0.602	751	8,010	
To Labour	36,000	2.55	91,869	By Normal Loss		1,500	-	1,27,869
To Factory o/h	-	-	16,000	By Finished Stock		32,000	3.75	1,19,859
	-	-	20,000	By Closing WIP		2,500	3.20	8,010
	36,000		1,27,869			36,000		1,27,869