ULTIMATE CA

PYQ RTP COMPILER

Chp 10 Process Cost

Costing CA Intermediate Regular Batch May / Sep 2025

CA PRANAV POPAT

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Past Year Questions (PYQs)

May 2018 to Jan 2025

PYQ Analysis

Exam	Q No.	Marks	Requirement	Special Points
PYQ - Jan 2025	3a	8m	Process X, Y Acc, Normal Loss, Abnormal Gain Account	Material added in Process Y not an additional rather increase units
PYQ - Sep 2024	MCQ - 1 to 5	10m	1) Equivalent Units of Mat and Mat cost pu 2) Equivalent Units of Lab, OH and total cost pu 3) abnormal loss 4) val of units transferred 5) val of closing WIP	Regular
PYQ - Sep 2024	MCQ 15	2m	Cost per unit	Regular
PYQ - May 2024	4a	8m	Process Accounts, Abnormal Loss and Gain Account, Costing P&L Account	Part of Process is sold directly (send to FG), Mgt and Selling Expenses to be taken in Costing P&L not process accounts
PYQ - Nov 2023	4c	5m	Process Accounts for both process	Basic - Easy without WIP
PYQ - May 2023	6e	5m	How will you treat normal loss, abnormal loss and abnormal gain in process costing?	Theory
PYQ - Nov 2022	3b	10m	Process Accounts, FG Account	No Opening Closing WIP. Similar to Module Problem
PYQ - May 2022	4a	10m	Statement of Equivalent Production, Valuation of Output, Check if further process or direct sell	Direct Selling of Chemical G, Output of Chemical GK, Yield in Process II
PYQ - Dec 2021	1d	5m	Process Account, Abnormal Loss/ Gain Account	Basic - Easy

PYQ Analysis

Exam	Q No.	Marks	Requirement	Special Points
PYQ - Jul 2021	4a	10m	% of wastage in Process Y, Process Accounts	1. Input units along with rate is given separately, which means material cost in table is just an additional material. 2. Using cost p.u. of Process Y to calculate Normal Loss (assuming there is no abnormal loss in X and Y accounts)
PYQ - Jan 2021	1c	5m	Equivalent Production, Abnormal Loss Account	Basic - Easy (FIFO)
PYQ - Nov 2020	4a	10m	Equivalent Production, Cost Statement, Abnormal Loss Account, Process I, Normal Loss Account	method not given - take WAM as opening % not given
PYQ - Nov 2019	4b	10m	Process Accounts, FG Accounts, Loss accounts, Ab. Gain Account	No Opening Closing WIP. Similar to Module Problem
PYQ - May 2019	2b	10m	Process Accounts along with Profit at each stage	Complete Question on Inter Process - Same as Module
PYQ - Nov 2018	1c	5m	Equivalent Production, Cost per unit	Easy - Basic with % given same on all elements
PYQ - May 2018	3b	10m	Process Accounts, Calculate SP of Final Product	Basic Question with No Special Adjustment

PYQ Jan 2025 – Q3a

3. (a) A chemical compound manufactured through two processes namely Process X and Process Y. Process Y is dependent on the output generated by Process X and the semi-finished chemical compound received from Process X shall be mixed up with further materials in Process Y. The details of costs and other particulars for each process are given as follows : **2+2+2 +2=8**

	Process X	**Process Y**
Direct Material	1,000 kgs @ ₹ 50 per kg	700 kgs @ ₹ 90 per kg
Direct Labour	₹ 35,000	₹ 25,000
Process Plant time	200 hrs @ ₹ 60/hr	120 hrs @ ₹ 80/hr
Expected output	75% of input	80% of input
Actual output kgs	700	1150
Realizable value of Normal Loss	₹ 8 per kg	₹ 5 per kg

PYQ Jan 2025 – Q3a

Notes :

(i) The departmental overhead for the period was ₹ 30,000 and is absorbed in each process on direct labour cost.

(ii) Process plant time represents the attributable plant run time with respect to each process and is a part of direct process cost.

(iii) Assume no finished stock and work in progress either at the beginning and end of the period.

Required :

Prepare Process X Account, Process Y Account, Normal Loss Account and Abnormal Gain Account.

PYQ Jan 2025 – Q3a

Process X

Particulars	units	Amount	Particulars	units	Amount
To Direct material	1000	50,000	By Normal loss	250	2000
To Direct labour		35,000	1000 x 25% x 8		
To Process Plant time (200 x 60)		12,000	By Process Y 150 p.u. x 700	700	105000
To Dept OH		17,500	By Abnormal loss 150 p.u x 50	50	7500
	1000	114500		1000	114500

WN-1 Dept OH Rate

$$\frac{30,000}{35000+25000} \times 100 = 50\% \text{ of lab cost}$$

WN-2 Cost p.u. of Process X

$$\frac{\text{Total cost} - \text{scrap value of normal loss}}{\text{Total units} - \text{normal loss units}}$$

$$= \frac{114500-2000}{1000-250} = 150 \text{ p.u.}$$

PYQ Jan 2025 – Q3a

Process Y

Particulars	units	Amount	Particulars	units	Amount
To Process X	700	105000	By Normal loss 20% of 1400 X 5	280	1400
To Direct mat.	700	63000			
To Direct lab.		25000	By FG (190.8036 X 1150)	1150	219424
To Process Plant time		9600			
To Dept OH		12500			
To Abnormal gain (190.8036 X 30)	30	5724			
	1430	220824		1430	220824

WN-3 cost p.u. of Y $\frac{215100 - 1400}{1400 - 280} = \frac{213700}{1120} = 190.8036$ pu

PYQ Jan 2025 – Q3a

Normal loss A/c

Particulars	units	Amount	Particulars	units	Amount
To Process X	250	2000	By CLC A/c	250	2000
To Process Y	280	1400	By CLC A/c	250	1250
			By Abnormal gain A/c	30	150
	530	3400		530	3400

Abnormal Gain A/c

Particulars	units	Amount	Particulars	units	Amount
To Normal loss	30	150	By Process Y	30	5724
To Costing P&L		5574			
	30	5724		30	5724

PYQ Sep 2024 – MCQ 1 to 5

Sagar Limited, an oil refinery uses Process Costing for determining the cost of each process. Management of Sagar Limited is confused about method of valuation of WIP. They have FIFO and Weighted Average Cost methods under consideration.

Finance manager Mr. Sahil has put forward that Weighted Average Cost method is suitable when there are significant fluctuations in. price and quantity. In this method, calculation has to be done at every purchase and it is a complex and time-consuming method.

He also stated that price and quantity of input and output material of Sagar Limited is almost same for whole year; hence FIFO method would be more suitable for the company. He also revealed that in oil refinery industry; FIFO method is preferred over Weighted Average Cost method and switching to FIFO method will save time and money.

He further stated that by using FIFO method closing WIP is valued at current cost and provided the following information:

PYQ Sep 2024 – MCQ 1 to 5

Opening WIP : 12,000 Units, Total cost ₹ 1,66,200.

Degree of Completion : Material - 100%

Labour and Overhead - 80%

Material introduced: (74,500 Units) ₹ 4,76,465

Direct Labour ₹ 3,70,395

Direct Overhead ₹ 2,96,316

Units Scrapped : 1,900 units Degree of Completion :

Material 100%

Labour and Overhead 70%

Closing WIP : 2,600 units Degree of Completion:

Material 100%

Labour and Overhead 60%

PYQ Sep 2024 – MCQ 1 to 5

Rest of the units were transferred to next process.

Normal Loss is 2% of total input unit including opening work-in-process. Realizable value of normal loss is ₹ 2 per unit deducted from cost of material introduced.

You are required to calculate the following using FIFO method (MCQs 1 to 5) :

1. *Equivalent units of Material and Material cost per unit*
   - *(A) 86,500 units and ₹ 5.50 per unit*
   - *(B) 74,500 units and ₹ 6.39 per unit*
   - *(C) 72,770 units and ₹ 6.50 per unit*
   - *(D) 72,600 units and ₹ 6.56 per unit*
2. *Equivalent units of labour and overheads and total cost per unit*
   - *(A) 82,490 units and ₹ 8.08 per unit*
   - *(B) 74,079 units and ₹ 9.00 per unit*
   - *(C) 75,290 units and ₹ 8.85 per unit*
   - *(D) 79,790 units and ₹ 8.35 per unit*

PYQ Sep 2024 – MCQ 1 to 5

3. *Value of abnormal loss to be shown in process account*

   (A) ₹ 2,176.00

   (B) ₹ 2,182.00

   (C) ₹ 2,168.35

   (D) ₹ 1,896.52

4. *Value of units transferred to next process*

   (A) ₹ 11,10,660

   (B) ₹ 12,75,600

   (C) ₹ 12,51,200

   (D) ₹ 12,72,800

5. *Value of closing WIP*

   (A) ₹ 31,096

   (B) ₹ 31,044

   (C) ₹ 30,940

   (D) ₹ 28,340

PYQ Sep 2024 – MCQ 1 to 5

Eqv WIP

Input	units	o/p	units	Mat %	Mat unit	Lab+OH %	Lab+OH unit
op wip	12000	frf op	12000	0	0	20	2400
Intro	74500	new	70000	100	70000	100	70000
		Nloss	1730	0	0	0	0
	86500	abloss	170	100	170	70	119
		1900-1730					
		clwip	2600	100	2600	60	1560
			86500		72770		74079

PYQ Sep 2024 – MCQ 1 to 5

cost p.u.

	Mat	lab	OH
cost	476465	370395	296316
scrap val (1730 x 2)	3460		
	473005	370395	296316
unit	72770	74079	74079
Cost p.u.	6.5	5	4

Total cost p.u. 15.5 p.u.

PYQ Sep 2024 – MCQ 1 to 5

Val of unit trf = Op wip cost = 16620

op. 2400 × 9 = 21600

current 70000 × 15.5 = 1085000

1272 80

MCQ 1 (d)

val of cl. wip. 2600 × 6.5 + 1560 × 9 = 30940

MCQ 2 (c)

ab | ors 170 × 6.5 + 119 × 9 = 2176

MCQ 5 (B)

PYQ Sep 2024 – MCQ 15

15. *A Chemical is passed through three processes and the output of Process 1 Account is transferred to Process 2 Account. The input units in Process 1 are 58,500 units and the output units are 55,200 units, normal loss is 2% and rest is abnormal loss.*

You are required to calculate the per unit cost of output units in Process 1 Account, if the total expenses incurred in Process 1 are, 6,87,960.

(A) ₹ 11.76

(B) ₹ 12.00

(C) ₹ 12.20

(D) ₹ 12.46

PYQ Sep 2024 – MCQ 15

Input		Output
58500	o/p	55200
	NL	1170
	Ablwb	2130
58500		58500

$$\text{Cost p.u.} = \frac{687960}{58500 - 1170} = \frac{687960}{57330} = 12 \quad (9)$$

PYQ May 2024 – Q4a

(a) *Meta Company Ltd. is engaged in the production of product 'Trio' which passes through two different processes Process P and Process Q. Other information obtained from books of account for the year is as follows:*

Particulars	Process P	Process Q
Raw material used	10,000	---
Raw material cost per unit	₹ 80	---
Direct wages	₹ 52,000	₹ 78,000
Direct Expenses	₹ 8,600	₹ 11,100
Selling price per unit of output	₹ 130	₹ 190

Production overheads of ₹ 3,00,000 are recovered as percentage of direct wages.

Actual output of the two processes was:

P-9,200 units and Q-6,400 units. 3/4th of the output of Process P was passed on to the Process Q and the balance was sold. The entire output of process Q was sold.

PYQ May 2024 – Q4a

Management & Selling expenses during the year were ₹ 1,70,000.

These are not allocable to the processes.

The normal loss of the two processes, calculated on the input of every process was:

Process P- 6% and Process Q-10%

The Loss of Process P was sold at ₹ 5 per unit and that of Q at ₹ 8 per unit. Assume that Process P and Process Q are not the responsibility centres.

You are required to prepare:

(i) Process P Account

(ii) Process Q Account

(iii) Abnormal Loss and Abnormal Gain Account

(iv) Costing Profit & Loss Account.

PYQ May 2024 – Q4a

(a) **Process- P Account**

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Material	10,000	8,00,000	By Normal Loss	600	3,000
To Wages		52,000	By Process Q		
To Direct Exp.		8,600	(9,200 × 3/4)	6,900	7,17,600
To Production Overheads (3,00,000 × 2/5)		1,20,000	By Costing Profit and Loss (P&L) (9,200 × 1/4)	2,300	2,39,200
			By Abnormal Loss	200	20,800
	10,000	9,80,600		10,000	9,80,600

$$\text{Cost per unit} = \frac{9,80,600-3,000}{10,000-600} = ₹\ 104 \text{ per unit}$$

PYQ May 2024 – Q4a

Process- Q Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Process P	6,900	7,17,600	By Normal Loss	690	5,520
To Wages		78,000			
To Direct Exp.		11,100	By Costing P&L	6,400	10,11,200
To Production Overheads (3,00,000 × 3/5)		180,000			
To Abnormal Gain	190	30,020			
	7,090	10,16,720		7,090	10,16,720

$$\text{Cost per unit} = \frac{9,86,700-5,520}{6900-690} = ₹158 \text{ per unit}$$

PYQ May 2024 – Q4a

Abnormal Loss Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Process- P	200	20,800	By Bank	200	1,000
			By Costing P&L		19,800
	200	20,800		200	20,800

Abnormal Gain Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Normal Loss	190	1,520	By Process Q	190	30,020
To Costing Profit and Loss		28,500			
	190	30,020		190	30,020

PYQ May 2024 – Q4a

Costing Profit & Loss Account for the year

Dr. **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Cost of Sales		By Sales	
P - 2,39,200		P 2300 @ 130	
Q - 10,11,200	12,50,400	Q 6400 @ 190	15,15,000
To Abnormal Loss	19,800	By Abnormal Gain	28,500
To Selling Expense	1,70,000		
To Net Profit	1,03,300		
	15,43,500		15,43,500

PYQ Nov 2023 – Q4c

(c) *A product passes through two processes; Process A and Process B.*

The output of Process A is treated as input of Process B.

The following information has been furnished:

	Process A	Process B
Input Material 78,000 Kg.@ ₹ 5	₹ 3,90,000	-
Indirect Material	-	₹34,320
Wages	₹ 2,85,000	₹ 3,30,000
Overhead	₹ 1,67,400	₹ 1,11,600
Output transferred to Process B	68,640 kgs	
Transfer to Finished Stock	-	69,000 kgs
Normal loss of input material (weight in kgs.)	7,800 kgs	240 kgs

There is no realisable value for normal loss. No stock of raw materials on work-in-process was left at the end.

You are required to prepare the Process account for each Process. **(5 Marks)**

PYQ Nov 2023 – Q4c

(c) **Process A Account**

Particulars	Units	₹	Particulars	Units	₹
To Material	78,000	3,90,000	By Normal Loss	7,800	-
To Wages		2,85,000	By Abnormal Loss	1,560	18,720
To Overheads		1,67,400	By Process B A/c	68,640	8,23,680
Total	**78,000**	**8,42,400**	**Total**	**78,000**	**8,42,400**

Cost per unit of completed units and abnormal loss = $\frac{8,42,400}{78,000 \text{ units} - 7,800 \text{ units}}$ = ₹ 12 unit

PYQ Nov 2023 – Q4c

Process B Account

Particulars	Units	₹	Particulars	Units	₹
To Process A A/c	68,640	8,23,680	By Normal loss	240	-
To Indirect Material		34,320	By Finished stock	69,000	13,11,000
To Wages		3,30,000			
To Overheads		1,11,600			
To Abnormal gain	600	11,400			
Total	**69,240**	**13,11,000**	**Total**	**69,240**	**13,11,000**

Cost per unit of completed units and abnormal gains:

$$\frac{\text{Total cost}}{\text{Inputs - Normal loss}} = \frac{₹12,99,600}{68,640 \text{ units} - 240 \text{ units}} = ₹19$$

PYQ Nov 2022 – Q3b

(b) *N Ltd. produces a product which passes through two processes – Process – I and Process-II. The company has provided following information related to the Financial Year 2021-22:*

	Process-I	**Process -II**
Raw Material @ ₹ 65 per unit	*6,500 units*	-
Direct Wages	*₹ 1,40,000*	*₹ 1,30,000*
Direct Expenses	*30% of Direct Wages*	*35% of Direct Wages*
Manufacturing Overheads	*₹ 21,500*	*₹ 24,500*
Realisable value of scrap per unit	*₹ 4.00*	*₹ 16.00*
Normal Loss	*250 units*	*500 units*
Units transferred to Process-II / finished stock	*6,000 units*	*5,500 units*
Sales	-	*5,000 units*

There was no opening or closing stock of work-in progress.

You are required to prepare:

(i) Process-I Account

(ii) Process -II Account

(iii) Finished Stock Account ***(10 Marks)***

PYQ Nov 2022 – Q3b

(b) **Process-I A/c**

Particulars	Units	(₹)	Particulars	Units	(₹)
To Raw material used (₹ 65 × 6,500 units)	6,500	4,22,500	By Normal loss (250 units × ₹ 4)	250	1,000
To Direct wages	--	1,40,000	By Process- II A/c (₹ 100 × 6,000 units)	6,000	6,00,000
To Direct expenses (30% of ₹ 1,40,000)	--	42,000	By Abnormal loss (₹ 100 × 250 units)	250	25,000
To Manufacturing overhead		21,500			
	6,500	6,26,000		6,500	6,26,000

Cost per unit of completed units and abnormal loss: $\frac{\text{Total Cost-Realisable value from normal loss}}{\text{Inputs Units-Normal loss units}}$

$$= \frac{₹\ 6,26,000 - ₹\ 1,000}{6,500 \text{units} - 250 \text{ units}} = \frac{₹\ 6,25,000}{6,250 \text{ units}} = ₹\ 100$$

PYQ Nov 2022 – Q3b

Process- II A/c

Particulars	Units	(₹)	Particulars	Units	(₹)
To Process - I A/c	6,000	6,00,000	By Normal loss (500 units × ₹16)	500	**8,000**
To Direct wages	--	1,30,000	By Finished Stock A/c (₹144 × 5,500 units)	5,500	7,92,000
To Direct expenses (35% of ₹ 1,30,000)	--	45,500			
To Manufacturing overhead	--	24,500			
	6,000	8,00,000		6,000	8,00,000

Cost per unit of completed units and abnormal loss:

$$\frac{\text{Total Cost - Realisable value from normal loss}}{\text{Inputs units - Normal loss units}}$$

$$= \frac{₹\ 8,00,000 - ₹\ 8,000}{6,000\ \text{units} - 500\ \text{units}} \quad = \frac{₹\ 7,92,000}{5,500\ \text{units}} = ₹144$$

PYQ Nov 2022 – Q3b

Finished Goods Stock A/c

Particulars	Units	(₹)	Particulars	Units	(₹)
To Process II A/c	5,500	7,92,000	By Cost of Sales (₹144 × 5,000 units)	5,000	7,20,000
			By Balance c/d	500	72,000
	5,500	7,92,000		5,500	7,92,000

PYQ May 2022 – Q4a

(a) *STG Limited is a manufacturer of Chemical 'GK', which is required for industrial use. The complete production operation requires two processes. The raw material first passes through Process I, where Chemical 'G' is produced. Following data is furnished for the month April 2022:*

Particulars	*(in kgs.)*
Opening work-in-progress quantity (Material 100% and conversion 50% complete)	*9,500*
Material input quantity	*1,05,000*
Work Completed quantity	*83,000*
Closing work-in-progress quantity (Material 100% and conversion 60% complete)	*16,500*

PYQ May 2022 – Q4a

You are further provided that:

Particulars	*(in ₹)*
Opening work-in-progress cost	
Material cost	*29,500*
Processing cost	*14,750*
Material input cost	*3,34,500*
Processing cost	*2,53,100*

Normal process loss may be estimated to be 10% of material input. It has no realizable value. Any loss over and above normal loss is considered to be 100% complete in material and processing.

The Company transfers 60,000 kgs. of output (Chemical G) from Process I to Process II for producing Chemical 'GK'. Further materials are added in Process II which yield 1.20 kg. of Chemical 'GK' for every kg. of Chemical 'G' introduced. The chemicals transferred to Process II for further processing are then sold as Chemical 'GK' for ₹ 10 per kg. Any quantity of output completed in Process I, are sold as Chemical 'G' @ ₹ 9 per kg.

The monthly costs incurred in Process II (other than the cost of Chemical 'G') are:

Input 60,000 kg. of Chemical 'G'

Materials Cost *₹ 85,000*

Processing Costs *₹ 50,000*

PYQ May 2022 – Q4a

You are required:

(i) Prepare Statement of Equivalent production and determine the cost per kg. of Chemical 'G' in Process I using the weighted average cost method.

(ii) Prepare a statement showing cost of Chemical 'G' transferred to Process II, cost of abnormal loss and cost of closing work-in progress.

(iii) STG is considering the option to sell 60,000 kg. of Chemical 'G' of Process I without processing it further in Process-II. Will it be beneficial for the company over the current pattern of processing 60,000 kg in process-II? ***(10 Marks)***

PYQ May 2022 – Q4a

(a) (i) Statement of Equivalent Production

Particulars	Input quantity	Particulars	Total	Material		Processing Cost	
				%	Units	%	Units
Opening WIP	9,500	Units completed	83,000	100%	83,000	100%	83,000
Material Input	1,05,000	Normal loss (10% of 1,05,000)	10,500	-	-	-	-
		Abnormal loss (Bal. fig.)	4,500	100%	4,500	100%	4,500

PYQ May 2022 – Q4a

		Closing WIP	16,500	100%	16,500	60%	9,900
	1,14,500		1,14,500		1,04,000		97,400

Statement of Cost for each element

Particulars	Material	Processing	Total cost
	(₹)	(₹)	(₹)
Cost of opening WIP	29,500	14,750	44,250
Cost incurred during the month	3,34,500	2,53,100	5,87,600
Total cost (A)	3,64,000	2,67,850	6,31,850
Equivalent production (B)	1,04,000	97,400	
Cost per kg of Chemical 'G' (A/B)	**3.5**	**2.75**	6.25

PYQ May 2022 – Q4a

(ii) **Statement showing cost of Chemical 'G' transferred to Process II, cost of abnormal loss and cost of closing work-in- progress**

	(₹)
Units transferred (60,000 × 6.25)	**3,75,000**
Abnormal loss (4,500 × 6.25)	**28,125**
Closing work in progress:	
Material (16,500 × 3.5)	**57,750**
Processing cost (9,900 × 2.75)	**27,225**
	84,975

PYQ May 2022 – Q4a

Calculation of Incremental Profit / Loss after further processing

	(₹)
If 60,000 units are sold @ ₹ 9	5,40,000
If 60,000 units are processed in process II (60,000 × 1.2 × ₹ 10)	7,20,000
Incremental Revenue (A)	**1,80,000**
Incremental Cost: (B)	
Material Cost	85,000
Processing Cost	50,000
	1,35,000
Incremental Profit (A-B)	45,000

Additional net profit on further processing in Process II is 45,000. Therefore, it is advisable to process further chemical 'G'.

PYQ Dec 2021 – Q1d

(d) *A product passes through Process-I and Process-II.*

Particulars pertaining to the Process-I are:

Materials issued to Process-I amounted to ₹ 80,000, Wages ₹ 60,000 and manufacturing overheads were ₹ 52,500. Normal Loss anticipated was 5% of input, 9,650 units of output were produced and transferred out from Process-I to Process-II. Input raw materials issued to Process-I were 10,000 units.

There were no opening stocks.

Scrap has realizable value of ₹ 5 per unit.

You are required to prepare:

(i) Process-I Account

(ii) Abnormal Gain/Loss Account ***(4 x 5 = 20 Marks)***

PYQ Dec 2021 – Q1d

(d) (i) Process - I Account

Particulars	Units	(₹)	Particulars	Units	(₹)
To Materials	10,000	80,000	By Normal loss (5%of 10,000)	500	2,500
To Wages	-	60,000	By Process-II A/c (₹20*×9,650units)	9,650	1,93,000
To Manufacturing OH		52,500			
To Abnormal Gain A/c (₹20*×150units)	150	3,000			
	10,150	1,95,500		10,150	1,95,500

$$* \frac{(80,000 + 60,000 + 52,500) - 2,500}{10,000 - 500} = ₹\ 20$$

(ii) Abnormal Gain - Account

Particulars	Units	(₹)	Particulars	Units	(₹)
To Normal loss A/c	150	750	By Process-I A/c	150	3,000
To Costing P&L A/c	-	2,250			
	150	3,000		150	3,000

PYQ Jul 2021 – Q4a

(a) A Manufacturing unit manufactures a product 'XYZ' which passes through three distinct Processes - X, Y and Z. The following data is given:

	Process X	Process Y	Process Z
Material consumed (in ₹)	2,600	2,250	2,000
Direct wages (in ₹)	4,000	3,500	3,000

- The total Production Overhead of ₹ 15,750 was recovered @ 150% of Direct wages.
- 15,000 units at ₹ 2 each were introduced to Process 'X'.
- The output of each process passes to the next process and finally, 12,000 units were transferred to Finished Stock Account from Process 'Z'.
- No stock of materials or work in progress was left at the end.

The following additional information is given:

Process	% of wastage to normal input	Value of Scrap per unit (₹)
X	6%	1.10
Y	?	2.00
Z	5%	1.00

PYQ Jul 2021 – Q4a

You are required to:

(i) Find out the percentage of wastage in process 'Y', given that the output of Process 'Y' is transferred to Process 'Z' at ₹ 4 per unit.

(ii) Prepare Process accounts for all the three processes X, Y and Z. ***(10 Marks)***

PYQ Jul 2021 – Q4a

(a)

Dr. **Process-X Account** *Cr.*

	Particulars	Units	(₹)		Particulars	Units	(₹)
To	Material introduced	15,000	30,000	By	Normal Loss A/c [(6% of 15,000 units) x ₹ 1.1]	900	990
"	Additional material	--	2,600	"	Process-Y A/c (₹ 2.951* × 14,100 units)	14,100	41,610
"	Direct wages	--	4,000				
"	Production OH	--	6,000				
		15,000	42,600			15,000	42,600

*Cost per unit of completed units

$$= \frac{\text{Total Cost} - \text{Realisable value from normal loss}}{\text{Inputs units} - \text{Normal loss units}} = \frac{₹\ 42,600 - ₹\ 990}{15,000 \text{ units} - 900 \text{ units}} = ₹\ 2.951$$

PYQ Jul 2021 – Q4a

Dr. **Process-Y Account** *Cr.*

	Particulars	Units	(₹)		Particulars	Units	(₹)
To	Process-X A/c	14,100	41,610	By	Normal Loss A/c [(#13.44% of 14,100 units) x ₹ 2]	1,895	3,790
"	Additional material	--	2,250	"	Process-Z A/c (₹ 4 × 12,205 units)	12,205	48,820
"	Direct wages	--	3,500				
"	Production OH	--	5,250				
		14,100	52,610			14,100	52,610

#Calculation for % of wastage in process 'Y':

PYQ Jul 2021 – Q4a

Let's consider number of units lost under process 'Y' = A

$$\text{Now, } \frac{\text{Total Cost - Realisable value from normal loss}}{\text{Inputs units - Normal loss units}} = 4$$

$$\frac{₹\ 52{,}610 - ₹\ 2A}{14{,}100 \text{ units} - A} = ₹\ 4$$

$$₹\ 52{,}610 - ₹\ 2A = ₹\ 56{,}400 - ₹\ 4A$$

$$2A = ₹\ 3{,}790 \Rightarrow A = 1{,}895 \text{ units}$$

$$\% \text{ of wastage} = \frac{1{,}895 \text{ units}}{14{,}100 \text{ units}} = \mathbf{13.44\%}$$

PYQ Jul 2021 – Q4a

Dr. **Process-Z Account** *Cr.*

Particulars	Units	(₹)	Particulars	Units	(₹)
To Process-Y A/c	12,205	48,820	By Normal Loss A/c [(5% of 12,205 units) x ₹ 1]	610	610
" Additional material	--	2,000	" Finished Stock A/c (₹ 4.9771[$] × 12,000 units)	12,000	59,726
" Direct wages	--	3,000			
" Production OH	--	4,500			
" Abnormal gain (₹ 4.9771[$] × 405 units)	405	2,016			
	12,610	60,336		12,610	60,336

[$]Cost per unit of completed units

$$= \frac{\text{Total Cost} - \text{Realisable value from normal loss}}{\text{Inputs units} - \text{Normal loss units}} = \frac{₹\ 58,320 - ₹\ 610}{12,205 \text{ units} - 610 \text{ units}} = ₹\ 4.9771$$

PYQ Jan 2021 – Q1c

(c) *MNO Ltd has provided following details:*

- *Opening work in progress is 10,000 units at ₹ 50,000 (Material 100%, Labour and overheads 70% complete).*
- *Input of materials is 55,000 units at ₹ 2,20,000. Amount spent on Labour and Overheads is ₹ 26,500 and ₹ 61,500 respectively.*
- *9,500 units were scrapped; degree of completion for material 100% and for labour & overheads 60%.*
- *Closing work in progress is 12,000 units; degree of completion for material 100% and for labour & overheads 90%.*
- *Finished units transferred to next process are 43,500 units.*

Normal loss is 5% of total input including opening work in progress. Scrapped units would fetch ₹ 8.50 per unit.

You are required to prepare using FIFO method:

(i) Statement of Equivalent production

(ii) Abnormal Loss Account

PYQ Jan 2021 – Q1c

(c) (i) Statement of Equivalent Production (Using FIFO method)

Particulars	Input Units	Particulars	Output Units	Equivalent Production			
				Material		Labour & O.H.	
				%	Units	%	Units
Opening WIP	10,000	Completed and transferred to Process-II					
Units introduced	55,000	- From opening WIP	10,000	-		30	3,000
		- From fresh inputs	33,500	100	33,500	100	33,500
			43,500		33,500		36,500
		Normal Loss {5% (10,000 + 55,000 units)}	3,250	-			-
		Abnormal loss (9,500 – 3,250)	6,250	100	6,250	60	3,750
		Closing WIP	12,000	100	12,000	90	10,800
	65,000		**65,000**		**51,750**		**51,050**

PYQ Jan 2021 – Q1c

(ii) Abnormal Loss A/c

Particulars	Units	(₹)	Particulars	Units	(₹)
To Process-I A/c (Refer Working Note-2)	6,250	29,698	By Cost Ledger Control A/c (6,250 units × ₹ 8.5)	6,250	53,125
To Costing Profit & Loss A/c	-	23,427			
	6,250	**53,125**		**6,250**	**53,125**

PYQ Jan 2021 – Q1c

Working Notes:

1. **Computation of Cost per unit**

Particulars	Materials (₹)	Labour (₹)	Overhead (₹)
Input costs	2,20,000	26,500	61,500
Less: Realisable value of normal scrap (3,250 units x ₹ 8.5)	(27,625)	--	--
Net cost	1,92,375	26,500	61,500
Equivalent Units	51,750	51,050	51,050
Cost Per Unit	**3.7174**	**0.5191**	**1.2047**

Total cost per unit = ₹ (3.7174 + 0.5191 + 1.2047) = ₹ 5.4412

2. **Valuation of Abnormal Loss**

	(₹)
Materials (6,250 units × ₹ 3.7174)	23,233.75
Labour (3,750 units × ₹ 0.5191)	1,946.63
Overheads (3,750 units × ₹ 1.2047)	4,517.62
	29,698

PYQ Nov 2020 – 4a

(a) *Following details are related to the work done in Process-I by ABC Ltd. during the month of May 2019 :*

	(₹)
Opening work in process (3,000 units)	
Materials	*1,80,500*
Labour	*32,400*
Overheads	*90,000*
Materials introduced in Process-I (42,000 units)	*36,04,000*
Labour	*4,50,000*
Overheads	*15,18,000*

Units Scrapped : *4,800 units*

Degree of completion :

Materials : *100%*

Labour & overhead : *70%*

Closing Work-in-process : *4,200 units*

Degree of completion :

Materials : *100%*

Labour & overhead : *50%*

PYQ Nov 2020 – 4a

Units finished and transferred to Process-II : 36,000 units

Normal loss:

4% of total input including opening work-in-process

Scrapped units fetch ₹ 62.50 per piece.

Prepare:

(i) Statement of equivalent production.

(ii) Statement of cost per equivalent unit.

(iii) Process-I A/c

(iv) Normal Loss Account and

(v) Abnormal Loss Account

PYQ Nov 2020 – 4a

(a) (i) Statement of Equivalent Production (Weighted Average method)

Particulars	Input Units	Particulars	Output Units	Equivalent Production			
				Material		Labour & O.H.	
				%	Units	%	Units
Opening WIP	3,000	Completed and transferred to Process-II	36,000	100	36,000	100	36,000
Units introduced	42,000	Normal Loss (4% of 45,000 units)	1,800	--	--	--	--
		Abnormal loss (Balancing figure)	3,000	100	3,000	70	2,100
		Closing WIP	4,200	100	4,200	50	2,100
	45,000		45,000		**43,200**		**40,200**

(ii) Statement showing cost for each element

Particulars	Materials (₹)	Labour (₹)	Overhead (₹)	Total (₹)
Cost of opening work-in-process	1,80,500	32,400	90,000	3,02,900
Cost incurred during the month	36,04,000	4,50,000	15,18,000	55,72,000

PYQ Nov 2020 – 4a

Less: Realisable Value of normal scrap (₹ 62.50 × 1,800 units)	(1,12,500)	--	--	(1,12,500)
Total cost: (A)	**36,72,000**	**4,82,400**	**16,08,000**	57,62,400
Equivalent units: (B)	43,200	40,200	40,200	
Cost per equivalent unit: (C) = (A ÷ B)	**85.00**	**12.00**	**40.00**	137.00

Statement of Distribution of cost

	Particulars	Amount (₹)	Amount (₹)
1.	Value of units completed and transferred: (36,000 units × ₹ 137)		49,32,000
2.	Value of Abnormal Loss:		
	- Materials (3,000 units × ₹ 85)	2,55,000	
	- Labour (2,100 units × ₹ 12)	25,200	
	- Overheads (2,100 units × ₹ 40)	84,000	3,64,200
3.	Value of Closing W-I-P:		
	- Materials (4,200 units × ₹ 85)	3,57,000	
	- Labour (2,100 units × ₹ 12)	25,200	
	- Overheads (2,100 units × ₹ 40)	84,000	4,66,200

PYQ Nov 2020 – 4a

(iii) **Process-I A/c**

Particulars	Units	(₹)	Particulars	Units	(₹)
To Opening W.I.P:					
– Materials	3,000	1,80,500	By Normal Loss (₹ 62.5 × 1,800 units)	1,800	1,12,500
– Labour	--	32,400			
– Overheads	--	90,000			
To Materials introduced	42,000	36,04,000	By Abnormal loss	3,000	**3,64,200**
To Labour		4,50,000	By Process-I A/c	36,000	49,32,000
To Overheads		15,18,000	By Closing WIP	4,200	**4,66,200**
	45,000	**58,74,900**		45,000	**58,74,900**

PYQ Nov 2020 – 4a

(iv) Normal Loss A/c

Particulars	Units	(₹)	Particulars	Units	(₹)
To Process-I A/c	1,800	1,12,500	By Cost Ledger Control A/c	1,800	1,12,500
	1,800	**1,12,500**		1,800	**1,12,500**

(v) Abnormal Loss A/c

Particulars	Units	(₹)	Particulars	Units	(₹)
To Process-I A/c	3,000	3,64,200	By Cost Ledger Control A/c (₹ 62.5 × 3,000 units)	3,000	**1,87,500**
			By Costing Profit & Loss A/c (Bal. Figure)		**1,76,700**
	3,000	**3,64,200**		3,000	**3,64,200**

PYQ Nov 2019 – 4b

(b) *A product passes through two distinct processes before completion.*

Following information are available in this respect :

	Process-1	Process-2
Raw materials used	10,000 units	-
Raw material cost (per unit)	₹ 75	-
Transfer to next process/Finished good	9,000 units	8,200 units
Normal loss (on inputs)	5%	10%
Direct wages	₹ 3,00,000	₹ 5,60,000
Direct expenses	50% of direct wages	65% of direct wages
Manufacturing overheads	25% of direct wages	15% of direct wages
Realisable value of scrap (per unit)	₹ 13.50	₹ 145

PYQ Nov 2019 – 4b

8,000 units of finished goods were sold at a profit of 15% on cost. There was no opening and closing stock of work-in-progress.

Prepare:

(i) Process-1 and Process-2 Account

(ii) Finished goods Account

(iii) Normal Loss Account

(iv) Abnormal Loss Account

(v) Abnormal Gain Account. ***(10 Marks)***

PYQ Nov 2019 – 4b

(b) (i)

Dr. **Process-1 Account** *Cr.*

	Particulars	Units	Total (₹)		Particulars	Units	Total (₹)
To	Raw Material Consumed	10,000	7,50,000	By	Normal Loss A/c @ 13.5	500	6,750
”	Direct Wages	--	3,00,000	”	Process 2 @ 133.5	9,000	12,01,500
”	Direct	--	1,50,000	”	By Abnormal	500	66,750
	Expenses				Loss @ 133.5		
“	Manufacturing Overheads		75,000				
		10,000	12,75,000			10,000	12,75,000

Cost per unit of completed units and abnormal loss:

$$= \frac{₹\,12,75,000 - ₹\,6,750}{10,000\,\text{units} - 500\,\text{units}} = ₹\ \mathbf{133.5}$$

PYQ Nov 2019 – 4b

(ii)

Dr. **Process-2 Account** *Cr.*

	Particulars	Units	Total (₹)		Particulars	Units	Total (₹)
To	Process-I A/c	9,000	12,01500	By	Normal Loss A/c @ 145	900	1,30,500
”	To Direct Wages	--	5,60,000	”	By Finished Stock A/c [bal fig]	8,200	21,04,667
”	Direct Expenses	--	3,64,000				
”	Manufacturing Overheads	--	84,000				
”	To Abnormal gain (₹ 256.67 × 100 units)	100	25,667				
		9,100	22,35,167			9,100	22,35,167

Cost per unit of completed units and abnormal gain:

$$= \frac{₹\,22,09,500 - ₹\,130500}{8,100\,\text{units}} = ₹\ \mathbf{256.67}$$

PYQ Nov 2019 – 4b

Dr. **Finished Goods A/c** *Cr.*

	Particulars	Units	Total (₹)		Particulars	Units	Total (₹)
To	Process II A/c	8,200	21,04,667	By	By Cost of Sales	8,000	20,53,333
				”	By Balance c/d	200	51,334
		8,200	**21,04,667**			**8,200**	**21,04,667**

(v) Abnormal Gain A/c

Dr. *Cr.*

	Particulars	Units	Total (₹)		Particulars	Units	Total (₹)
To	Normal Loss A/c @ 145	100	14,500	By	Process II	100	25,667
To	Costing P & L A/C		11,167				
		100	25,667			100	25,667

PYQ Nov 2019 – 4b

(iii) Normal Loss A/c

Dr. *Cr.*

	Particulars	Units	Total (₹)		Particulars	Units	Total (₹)
To	Process I	500	6,750	By	By abnormal Gain II	100	14,500
	Process II	900	1,30,500		By Cash	500	6,750
					By Cash	800	1,16,000
		1400	1,37,250			1400	1,37,250

(iv) Abnormal Loss A/c

Dr. *Cr.*

	Particulars	Units	Total (₹)		Particulars	Units	Total (₹)
To	Process I	500	66,750	By	By Cost Ledger Control A/c	500	6,750
					By Costing P& L A/C (Abnormal Loss)		60,000
			66,750				66,750

PYQ May 2019 – 2b

(b) *KT Ltd. produces a product EMM which passes through two processes before it is completed and transferred to finished stock. The following data relate to May 2019:*

Particulars	*Process*		*Finished stock*
	A (₹)	*B* (₹)	(₹)
Opening Stock	5,000	5,500	10,000
Direct Materials	9,000	9,500	
Direct Wages	5,000	6,000	
Factory Overheads	4,600	2,030	
Closing Stock	2,000	2,490	5,000
Inter-process profit included in opening stock		1,000	4,000

Output of Process A is transferred to Process B at 25% profit on the transfer price and output of Process B is transferred to finished stock at 20% profit on the transfer price. Stock in process is valued at prime cost. Finished stock is valued at the price at which it is received from Process B. Sales during the period are ₹75,000.

Prepare the Process cost accounts and Finished stock account showing the profit element at each stage. ***(10 Marks)***

PYQ May 2019 – 2b

(b) **Process-A A/c**

Particulars	Total (₹)	Cost (₹)	Profit (₹)	Particulars	Total (₹)	Cost (₹)	Profit (₹)
Opening stock	5,000	5,000	_	Process B A/c	**28,800**	**21,600**	**7,200**
Direct materials	9,000	9,000	_				
Direct wages	5,000	5,000	_				
	19,000	19,000	_				
Less: Closing stock	(2,000)	(2,000)	_				
Prime Cost	17,000	17,000	_				
Overheads	4,600	4,600	_				
Process Cost	**21,600**	**21,600**	_				
Profit (33.33% of total cost)	**7,200**	**-**	**7,200**				
	28,800	21,600	7,200		28,800	21,600	7,200

PYQ May 2019 – 2b

Process-B A/c

Particulars	Total (₹)	Cost (₹)	Profit (₹)	Particulars	Total (₹)	Cost (₹)	Profit (₹)
Opening stock	5,500	4,500	1,000	Finished stock A/c	**61,675**	**41,550**	**20,125**
Process A A/c	28,800	21,600	7,200				
Direct materials	9,500	9,500	_				
Direct wages	6,000	6,000	_				
	49,800	41,600	8,200				
Less: Closing stock	**(2,490)**	**(2,080)**	**(410)**				
Prime Cost	**47,310**	**39,520**	7,790				
Overheads	2,030	2,030	_				
Process Cost	49,340	41,550	7,790				
Profit (25% of total cost)	**12,335**	**-**	**12,335**				
	61,675	41,550	20,125		61,675	41,550	20,125

PYQ May 2019 – 2b

Finished Stock A/c

Particulars	Total (₹)	Cost (₹)	Profit (₹)	Particulars	Total (₹)	Cost (₹)	Profit (₹)
Opening stock	10,000	6,000	4,000	Costing P&L A/c	**75,000**	**44,181**	**30,819**
Process B A/c	61,675	41,550	20,125				
	71,675	47,550	24,125				
Less: Closing stock	**(5,000)**	**(3,369)**	**(1,631)**				
COGS	66,675	44,181	22,494				
Profit	**8,325**	-	**8,325**				
	75,000	44,181	30,819		75,000	44,181	30,819

PYQ Nov 2018 – 1c

(c) *Following details have been provided by M/s AR Enterprises:*

(i) *Opening works-in-progress* - *3000 units (70% complete)*

(ii) *Units introduced during the year* - *17000 units*

(iii) *Cost of the process (for the period)* - *₹ 33,12,720*

(iv) *Transferred to next process* - *15000 units*

(v) *Closing works-in-progress - 2200 units (80% complete)*

(vi) *Normal loss is estimated at 12% of total input (including units in process in the beginning). Scraps realise ₹ 50 per unit. Scraps are 100% complete.*

Using FIFO method, compute:

(i) *Equivalent production*

(ii) *Cost per equivalent unit*

PYQ Nov 2018 – 1c

(c) Statement of Equivalent Production Units (Under FIFO Method)

Particulars	Input units	Particulars	Output units	Equivalent Production	
				(%)	Equivalent units
Opening W-I-P	3,000	From opening W-I-P	3,000	30	900
Units introduced	17,000	From fresh inputs	12,000	100	12,000
		Units completed (Transferred to next process)	15,000		
		Normal Loss {12% (3,000 + 17,000 units)}	2,400	--	--
		Closing W-I-P	2,200	80	1760
		Abnormal loss (Balancing figure)	400	100	400
	20,000		11,000		15,060

Computation of cost per equivalent production unit :

Cost of the Process (for the period)	₹ 33,12,720
Less: Scrap value of normal loss (₹ 50 × 2,400 units)	(₹ 1,20,000)
Total process cost	₹ 31,92,720

PYQ May 2018 – 3b

(b) *Alpha Ltd. is engaged in the production of a product A which passes through 3 different process - Process P, Process Q and Process R. The following data relating to cost and output is obtained from the books of accounts for the month of April 2017:*

Particulars	*Process P*	*Process Q*	*Process R*
Direct Material	*38,000*	*42,500*	*42,880*
Direct Labour	*30,000*	*40,000*	*50,000*

Production overheads of ₹ 90,000 were recovered as percentage of direct labour.

10,000 kg of raw material @ ₹ 5 per kg. was issued to Process P. There was no stock of materials or work in process. The entire output of each process passes directly to the next process and finally to warehouse. There is normal wastage, in processing, of 10%. The scrap value of wastage is ₹ 1 per kg. The output of each process transferred to next process and finally to warehouse are as under:

Process P = 9,000 kg

Process Q = 8,200 kg

Process R = 7,300 kg

PYQ May 2018 – 3b

The company fixes selling price of the end product in such a way so as to yield a profit of 25% selling price.

Prepare Process P, Q and R accounts. Also calculate selling price per unit of end product. ***(10 Marks)***

PYQ May 2018 – 3b

(b)

Process- P Account

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

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

PYQ May 2018 – 3b

Process- Q Account

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

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

PYQ May 2018 – 3b

Process- R Account

Particulars	Kg.	Amount (₹)	Particulars	Kg.	Amount (₹)
To Process-Q A/c	8,200	2,54,200	By Normal wastage (820 kg. × Re.1)	820	820
To Direct Material	---	42,880	By Abnormal loss (80 kg. × ₹ 52)	80	4,160
To Direct Labour	---	50,000	By Finished Goods (7,300 kg. × ₹52)	7,300	3,79,600
To Production OH (₹ 90,000 × 5/12)	---	37,500			
	8,200	3,84,580		8,200	3,84,580

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

Calculation of Selling price per unit of end product:

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

Revision Test Papers (RTPs)

May 2018 to Sep 2024

RTP Analysis

Exam	Q No.	Requirement	Special Points
RTP Jan 25	Q2	Case Scenario MCQ - (i) Transfer price of Process I Output (ii) Transfer price of Process II Output (iii) Transfer price of Process III Output (iv) Cost Portion of Process III Output (v) Cost Portion of Closing Stock of Process III	Regular - Same as Study Material Problem
RTP Sep 24	Q4	MCQ - Value of Abnormal Gain	Material Purchased and Issued separately given with units
RTP Sep 24	Q14	Compute Equivalent Production, Cost per equivalent unit, Value of Abnormal Gain, WIP and Output	Presentation of Abnormal Gain and completion %
RTP Nov 23	Q9	Compute Equivalent Production, Cost per equivalent unit, Value of WIP and Output of Process II	Basic Question with No Special Adjustment
RTP May 23	Q9	Equivalent prod Statement, Cost Statement, Cost Apportionment, Process I Account	Similar to ICAI SM Question (Sugarcane)
RTP Nov 22	Q9	Process Accounts, Cost per ton	Transfer to Warehouse, Weight Loss, Scrap Loss, Units added with additonal materials
RTP May 22	Q9	Equivalent Production, Cost per unit and Process Accounts for both Processes	Similar to Module Exercise Que 5 (Page 10.32) Multi Process with Packing Material
RTP Nov 21	Q9	Equivalent prod Statement, Cost Statement, Cost Apportionment, Process I Account	Basic Question on Weighted Average Method (No Loss)

RTP Analysis

Exam	Q No.	Requirement	Special Points
RTP May 21	Q8	Equivalent units, Cost p.u., Cost apportionment, Process I Account and Process II Account	Similar to Module Exercise Que 5 (Page 10.32) Multi Process with Packing Material
RTP Nov 20	Q9	Process I, II, III and Bye Product Process	NRV of Bye Product should be credited in Process Account to obtain normal cost per unit (By Product treatment is similar to Normal Loss Scrap)
RTP May 20	Q8	RM Input Qty, Normal Loss and Abnormal Loss, Cost of RM, Lab and OH, Process Account	Separate % for Lab and OH, Normal Loss is % of input (not including op wip), Add Back of Scrap Value of Normal Loss while obtaining Material Cost
RTP Nov 2019	Q11	Equivalent Production, Value of Output	% completion of abnormal loss they have taken similar to closing WIP without any info in question – illogical
RTP May 2019	Q8	Compute Equivalent Production, Cost per equivalent unit, Apportionment of Cost - W Avg	Basic Question on Weighted Average Method (No Loss)
RTP Nov 2018	Q9	Process III Accounts (FIFO not written but used)	Material from Previous Process and Material Added in Current Process to be taken separate, Normal Loss is on % of produced units, calculation of production units, Material A will be taken as 100% in all cases and 0% in Opening WIP, In Cost per unit Scrap is deducted from Material A (assumed FIFO method based on data)
RTP May 2018	Q9	RM Input Qty, Normal Loss and Abnormal Loss, Cost of RM, Lab and OH, Process Account	(Same as RTP May 2020)

RTP Jan 2025 – Q2 (case scenario MCQ)

2. Knowing the hectic schedule of a student preparing for the examination, a homemaker managing work from home or a new parent busy in neonatal care, a freshly qualified professional (Mr. Rishi) entered into a start-up business of manufacturing frozen foods.

   The process majorly involve washing and cutting the vegetables (Process I), blanching, cooling and mixing of ingredients with spices (Process II), forming, frying and freezing the final product (Process III).

   In Accounts, Mr. Rishi normally transfers the output of one process to another process at cost but, being a young entrepreneur, he is interested in knowing the profit made at each and every process. Thus, it was decided to transfer the output of Process I and II to the next process at cost plus 25%. Further, the output of Process III is also transferred to finished stock at cost plus 33 1/3%.

RTP Jan 2025 – Q2 (case scenario MCQ)

Following information is extracted from the books of Mr. Rishi for the current year:

	Process I (₹)	Process II (₹)	Process III (₹)	Finished Stock (₹)
Opening stock	8,02,500	14,44,500	21,40,000	24,07,500
Direct materials	42,80,000	34,77,500	26,75,000	--
Direct wages	66,87,500	57,78,000	49,22,000	--
Factory overheads	51,36,000	38,52,000	35,57,750	--
Closing stock	10,70,000	17,12,000	20,86,500	26,75,000
Inter-process profit included in opening stock	NIL	2,14,000	5,35,000	10,70,000

Stock in processes is valued at prime cost. The finished stock is valued at the price at which it is received from Process III.

RTP Jan 2025 – Q2 (case scenario MCQ)

Mr. Rishi wants you to FIGURE OUT the following to analyse the profit generated at each process:

(i) What is the transfer price value at which the output of Process I is transferred to Process II?

(a) ₹ 1,97,95,000

(b) ₹ 39,59,000

(c) ₹ 1,58,36,000

(d) ₹ 1,69,06,000

(ii) What is the transfer price value at which the output of Process II is transferred to Process III?

(a) ₹ 1,20,97,476

(b) ₹ 4,07,93,750

(c) ₹ 2,86,96,274

(d) ₹ 3,43,47,000

RTP Jan 2025 – Q2 (case scenario MCQ)

(iii) What is the transfer price value at which the output of Process III is transferred to Finished Stock?

(a) ₹ 5,40,88,500

(b) ₹ 3,98,91,140

(c) ₹ 2,94,44,860

(d) ₹ 6,93,36,000

(iv) What is the cost value at which the output of Process III is transferred to Finished Stock?

(a) ₹ 5,40,88,500

(b) ₹ 3,98,91,140

(c) ₹ 2,94,44,860

(d) ₹ 6,93,36,000

RTP Jan 2025 – Q2 (case scenario MCQ)

(v) What is the cost value of closing stock of Process III A/c?

(a) ₹ 20,86,500

(b) ₹ 15,64,884

(c) ₹ 3,98,91,140

(d) ₹ 5,21,616

RTP Jan 2025 – Q2 (case scenario MCQ)

(a) Process I Account

Particulars	Cost (₹)	Profit (₹)	Total (₹)	Particulars	Cost (₹)	Profit (₹)	Total (₹)
Opening Stock	8,02,500	–	8,02,500	Process II A/c (Transfer)*	1,58,36,000	39,59,000	1,97,95,000
Direct Material	42,80,000	–	42,80,000	Closing stock	10,70,000	–	10,70,000
Direct Wages	66,87,500	–	66,87,500				
Prime Cost	1,17,70,000	–	1,17,70,000				
Manufacturing Overheads	51,36,000	–	51,36,000				
Total cost	1,69,06,000	–	1,69,06,000				
Costing Profit and Loss A/c**		39,59,000	39,59,000				
	1,69,06,000	39,59,000	2,08,65,000		1,69,06,000	39,59,000	2,08,65,000

*Transfer price = (Total Cost - Closing Stock) (1 + 25%)

= (1,69,06,000 - 10,70,000) x 1.25

= ₹ 1,97,95,000

**Profit on transfer = (1,69,06,000 - 10,70,000) x .25 = ₹ 39,59,000

RTP Jan 2025 – Q2 (case scenario MCQ)

(ii) (b) Process II Account

Particulars	Cost (₹)	Profit (₹)	Total (₹)	Particulars	Cost (₹)	Profit (₹)	Total (₹)
Opening Stock	12,30,500	2,14,000	14,44,500	By Process III A/c (Transfer)**	2,86,96,274	1,20,97,476	4,07,93,750
Process I A/c	1,58,36,000	39,59,000	1,97,95,000	Closing stock*	14,77,726	2,34,274	17,12,000
Direct Material	34,77,500	-	34,77,500				
Direct Wages	57,78,000	-	57,78,000				
Prime Cost	2,63,22,000	41,73,000	3,04,95,000				
Manufacturing Overheads	38,52,000	-	38,52,000				
Total cost	3,01,74,000	41,73,000	3,43,47,000				
Costing Profit and Loss A/c***	-	81,58,750	81,58,750				
	3,01,74,000	1,23,31,750	4,25,05,750		3,01,74,000	1,23,31,750	4,25,05,750

* Cost of Closing Stock = $\left(\frac{₹\ 2,63,22,000}{₹\ 3,04,95,000}\right)$ x ₹ 17,12,000 = ₹ 14,77,726

**Transfer price = (Total Cost - Closing Stock) (1 + 25%)

= (3,43,47,000 - 17,12,000) x 1.25 = ₹ 4,07,93,750

***Profit on transfer = (3,43,47,000 - 17,12,000) x .25 = ₹ 81,58,750

RTP Jan 2025 – Q2 (case scenario MCQ)

(iii) (d) Process III Account

Particulars	Cost (₹)	Profit (₹)	Total (₹)	Particulars	Cost (₹)	Profit (₹)	Total (₹)
Opening Stock	16,05,000	5,35,000	21,40,000	By Finished Stock A/c** (Transfer)	3,98,91,140	2,94,44,860	6,93,36,000
Process II A/c	2,86,96,274	1,20,97,476	4,07,93,750	Closing stock*	15,64,884	5,21,616	20,86,500
Direct Material	26,75,000	--	26,75,000				
Direct Wages	49,22,000	--	49,22,000				
Prime Cost	3,78,98,274	1,26,32,476	5,05,30,750				
Manufacturing Overheads	35,57,750	--	35,57,750				
Total cost	4,14,56,024	1,26,32,476	5,40,88,500				
Costing Profit and Loss A/c***	-	1,73,34,000	1,73,34,000				
	4,14,56,024	2,99,66,476	7,14,22,500		4,14,56,024	2,99,66,476	7,14,22,500

* Cost of Closing Stock = $\left(\frac{₹\ 3,78,98,274}{₹\ 5,05,30,750}\right)$ x ₹ 20,86,500

= ₹ 15,64,884

**Transfer price = (Total Cost - Closing Stock) (1 + 33 1/3%)

= (5,40,88,500 - 20,86,500) x (1 + 33 1/3%)

= ₹ 6,93,36,000

***Profit on transfer = (5,40,88,500 - 20,86,500) x 33 1/3%

= ₹ 1,73,34,000

(iv) (b) Refer part (iii) above.

(v) (b) Refer part (iii) above.

RTP Sep 2024 – Q4

4. The following information is available in respect of Process I: Raw material purchased and introduced 10,000 units @ 5 per unit Raw Material received from store 4000 units @ 6 per unit Direct Labour 40,000 Overheads 28,000 Output of Process is 13,500 units, Normal wastage 5% of inputs Scrap value of wastage 4 per unit The value of Abnormal Gain is:

(a) ₹ 2062.68

(b) ₹ 2135.34

(c) ₹ 2103.70

(d) ₹ 2093.2

RTP Sep 2024 – Q4

Input units	10,000+4000 =	14000
output units		13500
loss units		500
normal loss	5% of 14000	700
Abgain units		(200)

$$\text{cost p.u.} = \frac{50{,}000 + 24000 + 40{,}000 + 28000 - 700 \times 4}{14000 - 700} = 10.46616$$

abn. gain value = $200 \times 10.46616 = 2093.2$

RTP Sep 2024 – Q14

14. The following data are available in respect of Process-I for June 2024:

(1) Opening stock of work in process: 600 units at a total cost of ₹ 4,20,000.

(2) Degree of completion of opening work in process:

Material	100%
Labour	60%
Overheads	60%

(3) Input of materials at a total cost of ₹ 55,20,000 for 9,200 units.

(4) Direct wages incurred ₹ 18,60,000

(5) Production overhead ₹ 8,63,000.

RTP Sep 2024 – Q14

(6) Units scrapped 200 units. The stage of completion of these units was:

Materials	100%
Labour	80%
Overheads	80%

(7) Closing work in process; 700 units. The stage of completion of these units was:

Material	100%
Labour	70%
Overheads	70%

(8) 8,900 units were completed and transferred to the next process.

(9) Normal loss is 4% of the total input (opening stock plus units put in)

(10) Scrap value is ₹ 60 per unit.

RTP Sep 2024 – Q14

You are required to:

(i) COMPUTE equivalent production,

(ii) CALCULATE the cost per equivalent unit for each element.

(iii) CALCULATE the cost of abnormal loss (or gain), closing work in process and the units transferred to the next process using the FIFO method.

RTP Sep 2024 – Q14

14. (i) Statement of Equivalent Production (FIFO Method)

Input		Output		Equivalent Production					
				Materials		Labour		Production Overhead	
Details	**Units**	**Details**	**Units**	**%**	**Units**	**%**	**Units**	**%**	**Units**
Opening Stock	600	From opening stock	600	-	-	40	240	40	240
		- From fresh materials	8,300	100	8,300	100	8,300	100	8,300
		Closing W-I-P	700	100	700	70	490	70	490
Fresh inputs	9,200	Normal loss	392	-	-	-	-	-	-
			9,992		9,000		9,030		9,030
		Less: Abnormal Gain	(192)	100	(192)	100	(192)	100	(192)
	9,800		9,800		8,808		8,838		8,838

RTP Sep 2024 – Q14

(ii) Statement of Cost per equivalent units

Elements	(₹)	Cost (₹)	Equivalent units (EU)	Cost per EU (₹)
Material Cost	55,20,000			
Less: Scrap realisation 392 units @ ₹ 60/- p.u.	(23,520)	54,96,480	8,808	624.03
Labour cost		18,60,000	8,838	210.45
Production OH Cost		8,63,000	8,838	97.65
Total Cost		82,19,480		932.13

(iii) Cost of Abnormal Gain – 192 Units

	(₹)	(₹)
Material cost of 192 units @ ₹ 624.03 p.u.	1,19,813.76	
Labour cost of 192 units @ ₹ 210.45 p.u.	40,406.40	
Production OH cost of 192 units @ ₹ 97.65 p.u.	18,748.80	1,78,968.96

RTP Sep 2024 – Q14

Cost of closing WIP – 700 Units		
Material cost of 700 equivalent units @ ₹ 624.03 p.u.	4,36,821.00	
Labour cost of 490 equivalent units @ ₹ 210.45 p.u.	1,03,120.50	
Production OH cost of 490 equivalent @ ₹ 97.65 p.u.	47,848.50	5,87,790.00

RTP Sep 2024 – Q14

Cost of 8,900 units transferred to next process		₹
(i)	Cost of opening W-I-P Stock b/f – 600 units	4,20,000.00
(ii)	Cost incurred on opening W-I-P stock	
	Material cost	—
	Labour cost 240 equivalent units @ ₹ 210.45 p.u.	50,508.00
	Production OH cost 240 equivalent units @ ₹ 97.65 p.u.	23,436.00
		4,93,944.00
(iii)	Cost of 8,300 completed units	
	8,300 units @ ₹ 932.13 p.u.	77,36,679.00
	Total cost [(i) + (ii) + (iii))]	86,50,623.00

RTP Nov 2022 – Q9

9. SM Pvt. Ltd. manufactures their products in three consecutive processes. The details are as below:

	Process A	Process B	Process C
Transferred to next Process	60%	50%	
Transferred to warehouse for sale	40%	50%	100%

In each process, there is a weight loss of 2% and scrap of 8% of input of each process. The realizable value of scrap of each process is as below:

Process A @ ₹ 2 per ton

Process B @ ₹ 4 per ton

Process C @ ₹ 6 per ton.

The following particulars relate to April, 2022:

	Process A	Process B	Process C
Materials used (in Tons)	1,000	260	140
Rate per ton	₹ 20	₹ 15	₹ 10
Direct Wages	₹ 4,000	₹ 3,000	₹ 2,000
Direct Expenses	₹ 3,160	₹ 2,356	₹ 1,340

PREPARE Process Accounts- A, B and C & calculate cost per ton at each process.

RTP Nov 2022 – Q9

9. **Process A Account**

Particulars	Tones	Amount (₹)	Particulars	Tones	Amount (₹)
To Materials	1,000	20,000	By Weight Loss	20	---
To Wages		4,000	By Scrap	80	160
To Direct Expenses		3,160	By Process B	540	16,200
			By Warehouse	360	10,800
Total	**1,000**	**27,160**	**Total**	**1,000**	**27,160**

$$\text{Cost per Tonne} = \frac{27,160 - 160}{1,000 - 20 - 80}$$

$$= \frac{27,000}{900}$$

$$= ₹\ 30 \text{ per ton}$$

RTP Nov 2022 – Q9

Process B Account

Particulars	Tones	Amount (₹)	Particulars	Tones	Amount (₹)
To Process A	540	16,200	By Weight Loss	16	---
To Materials	260	3,900	By Scrap	64	256
To Wages		3,000	By Process C	360	12,600
To Direct Expenses		2,356	By Warehouse	360	12,600
Total	**800**	**25,456**	**Total**	**800**	**25,456**

$$\text{Cost per Tonne} = \frac{25{,}456 - 256}{800 - 16 - 64}$$

$$= \frac{25{,}200}{720}$$

$$= ₹35 \text{ per ton}$$

RTP Nov 2022 – Q9

Process C Account

Particulars	Tones	Amount (₹)	Particulars	Tones	Amount (₹)
To Process B	360	12,600	By Weight Loss	10	---
To Materials	140	1,400	By Scrap	40	240
To Wages		2,000	By Warehouse	450	17,100
To Direct Expenses		1,340			
Total	**500**	**17,340**	**Total**	**500**	**17,340**

$$\text{Cost per Tonne} = \frac{17,340 - 240}{500 - 10 - 40}$$

$$= \frac{17,100}{450}$$

$$= ₹\ 38 \text{ per ton}$$

RTP Nov 2020 – Q9

9. M Ltd. produces a product-X, which passes through three processes, I, II and III. In Process-III a by-product arises, which after further processing at a cost of ₹85 per unit, product Z is produced. The information related for the month of August 2020 is as follows:

	Process-I	Process-II	Process-III
Normal loss	5%	10%	5%
Materials introduced (7,000 units)	1,40,000	-	-
Other materials added	62,000	1,36,000	84,200
Direct wages	42,000	54,000	48,000
Direct expenses	14,000	16,000	14,000

Production overhead for the month is ₹2,88,000, which is absorbed as a percentage of direct wages.

The scrapes are sold at ₹10 per unit

Product-Z can be sold at ₹135 per unit with a selling cost of ₹15 per unit

No. of units produced:

Process-I- 6,600; Process-II- 5,200, Process-III- 4,800 and Product-Z- 600

There is not stock at the beginning and end of the month.

You are required to PREPARE accounts for:

(i) Process-I, II and III

(ii) By-product process.

RTP Nov 2020 – Q9

9. (i) **Process-I A/c**

Particulars	Units	Amt.(₹)	Particulars	Units	Amt.(₹)
To Materials	7,000	1,40,000	By Normal loss (5% of 7,000)	350	3,500
To Other materials	-	62,000	By Process-II*	6,600	3,35,955
To Direct wages	-	42,000	By Abnormal loss*	50	2,545
To Direct expenses	-	14,000			
To Production OH (200% of ₹42,000)	-	84,000			
	7,000	3,42,000		7,000	3,42,000

$$* \frac{₹(3,42,000 - 3,500)}{(7,000 - 350)\text{ units}} = ₹50.9022$$

Process-II A/c

Particulars	Units	Amt.(₹)	Particulars	Units	Amt.(₹)
To Process-I A/c	6,600	3,35,955	By Normal loss (10% of 6,600)	660	6,600

RTP Nov 2020 – Q9

To Other materials	-	1,36,000	By Process-III**	5,200	5,63,206
To Direct wages	-	54,000	By Abnormal loss**	740	80,149
To Direct expenses	-	16,000			
To Production OH (200% of ₹54,000)	-	1,08,000			
	6,600	6,49,955		6,600	6,49,955

** $\frac{₹(6,49,955-6,600)}{(6,600-660)\text{ units}}$ = ₹108.3089

RTP Nov 2020 – Q9

Process-III A/c

Particulars	Units	Amt.(₹)	Particulars	Units	Amt.(₹)
To Process-I A/c	5,200	5,63,206	By Normal loss (5% of 5,200)	260	2,600
To Other materials	-	84,200	By Product-X***	4,800	8,64,670
To Direct wages	-	48,000			
To Direct expenses	-	14,000	By Product-Z# (₹35×600)	600	21,000
To Production OH (200% of ₹48,000)	-	96,000			
To Abnormal gain***	460	82,864			
	5,660	8,88,270		5,660	8,88,270

*** $\frac{₹(8,05,406-2,600-21,000)}{(5,200-260-600)\text{ units}}$ = ₹180.1396

Realisable value = ₹135 – (85+15) = ₹35

RTP Nov 2020 – Q9

(ii) **By-Product Process A/c**

Particulars	Units	Amt.(₹)	Particulars	Units	Amt.(₹)
To Process-III A/c	600	21,000	By Product-Z	600	81,000
To Processing cost	-	51,000			
To Selling expenses	-	9,000			
	600	81,000		600	81,000

RTP May 2020 – Q8

8. Star Ltd. manufactures chemical solutions for the food processing industry. The manufacturing takes place in a number of processes and the company uses FIFO method to value work-in-process and finished goods. At the end of the last month, a fire occurred in the factory and destroyed some of papers containing records of the process operations for the month.

Star Ltd. needs your help to prepare the process accounts for the month during which the fire occurred. You have been able to gather some information about the month's operating activities but some of the information could not be retrieved due to the damage. The following information was salvaged:

- Opening work-in-process at the beginning of the month was 1,600 litres, 70% complete for labour and 60% complete for overheads. Opening work-in-process was valued at ₹ 1,06,560.
- Closing work-in-process at the end of the month was 320 litres, 30% complete for labour and 20% complete for overheads.
- Normal loss is 10% of input and total losses during the month were 1,200 litres partly due to the fire damage.
- Output sent to finished goods warehouse was 8,400 litres.
- Losses have a scrap value of ₹15 per litre.
- All raw materials are added at the commencement of the process.

RTP May 2020 – Q8

- The cost per equivalent unit (litre) is ₹78 for the month made up as follows:

	(₹)
Raw Material	46
Labour	14
Overheads	18
	78

Required:

(i) CALCULATE the quantity (in litres) of raw material inputs during the month.

(ii) CALCULATE the quantity (in litres) of normal loss expected from the process and the quantity (in litres) of abnormal loss / gain experienced in the month.

(iii) CALCULATE the values of raw material, labour and overheads added to the process during the month.

(iv) PREPARE the process account for the month.

RTP May 2020 – Q8

8. (i) Calculation of Raw Material inputs during the month:

Quantities Entering Process	Litres	Quantities Leaving Process	Litres
Opening WIP	1,600	Transfer to Finished Goods	8,400
Raw material input (balancing figure)	8,320	Process Losses	1,200
		Closing WIP	320
	9,920		9,920

RTP May 2020 – Q8

(ii) Calculation of Normal Loss and Abnormal Loss/Gain

	Litres
Total process losses for month	1,200
Normal Loss (10% input)	832
Abnormal Loss (balancing figure)	368

(iii) Calculation of values of Raw Material, Labour and Overheads added to the process:

	Material	Labour	Overheads
Cost per equivalent unit	₹46.00	₹14.00	₹18.00
Equivalent units (litre) (refer the working note)	7,488	7,744	7,872
Cost of equivalent units	₹3,44,448	₹1,08,416	₹1,41,696
Add: Scrap value of normal loss (832 units × ₹15)	₹12,480	--	--
Total value added	₹3,56,928	₹1,08,416	₹1,41,696

RTP May 2020 – Q8

Workings:

Statement of Equivalent Units (litre):

Input Details	Units	Output details	Units	Equivalent Production					
				Material		Labour		Overheads	
				Units	(%)	Units	(%)	Units	(%)
Opening WIP	1,600	Units completed:							
Units introduced	8,320	- Opening WIP	1,600	--	--	480	30	640	40
		- Fresh inputs	6,800	6,800	100	6,800	100	6,800	100
		Normal loss	832	--	--	--	--	--	--
		Abnormal loss	368	368	100	368	100	368	100
		Closing WIP	320	320	100	96	30	64	20
	9,920		9,920	7,488		7,744		7,872	

RTP May 2020 – Q8

(iv) **Process Account for the month**

	Litres	Amount (₹)		Litres	Amount (₹)
To Opening WIP	1,600	1,06,560	By Finished goods [8400 x ₹ 78]	8,400	6,55,200
To Raw Materials	8,320	3,56,928	By Normal loss [832 x ₹ 15]	832	12,480
To Wages	--	1,08,416	By Abnormal loss [368 x ₹ 78]	368	28,704
To Overheads	--	1,41,696	By Closing WIP [(320 x ₹ 46) + (320 x .30 x ₹ 14) + (320 x .20 x ₹ 18)]	320	17,216
	9,920	7,13,600		9,920	7,13,600

RTP Nov 2019 – Q11

11. A product is manufactured in two sequential processes, namely Process-1 and Process-2. The following information relates to Process-1. At the beginning of June 2019, there were 1,000 WIP goods (60% completed in terms of conversion cost) in the inventory, which are valued at ₹2,86,020 (Material cost: ₹2,55,000 and Conversion cost: ₹31,020). Other information relating to Process-1 for the month of June 2019 is as follows;

Cost of materials introduced- 40,000 units (₹)	96,80,000
Conversion cost added (₹)	18,42,000
Transferred to Process-2 (Units)	35,000
Closing WIP (Units) (60% completed in terms of conversion cost)	1,500

100% of materials are introduced to Process-1 at the beginning. Normal loss is estimated at 10% of input materials (excluding opening WIP).

Required:

(i) PREPARE a statement of equivalent units using the weighted average cost method and thereby calculate the following:

(ii) CALCULATE the value of output transferred to Process-2 and closing WIP.

RTP Nov 2019 – Q11

11. (i) Statement of Equivalent Production

Particulars	Input Units	Particulars	Output Units	Equivalent Production			
				Material		Conversion cost	
				%	Units	%	Units
Opening WIP	1,000	Completed and transferred to Process-2	35,000	100	35,000	100	35,000
Units introduced	40,000	Normal Loss (10% of 40,000)	4,000	--	--	--	--
		Abnormal loss (Balancing figure)	500	100	500	60	300
		Closing WIP	1,500	100	1,500	60	900
	41,000		41,000		37,000		36,200

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(ii) Calculation of value of output transferred to Process-2 & Closing WIP

	Amount (₹)	Amount (₹)
1. Value of units completed and transferred (35,000 units × ₹ 320.25) (Refer working note)		1,12,08,750
3. Value of Closing W-I-P:		
- Materials (1,500 units × ₹ 268.51)	4,02,765	
- Conversion cost (900 units × ₹ 51.74)	46,566	4,49,331

Workings:

Cost for each element

Particulars	Materials (₹)	Conversion (₹)	Total (₹)
Cost of opening work-in-process	2,55,000	31,020	2,86,020
Cost incurred during the month	96,80,000	18,42,000	1,15,22,000
Total cost: (A)	99,35,000	18,73,020	1,18,08,020
Equivalent units: (B)	37,000	36,200	
Cost per equivalent unit: (C) = (A ÷ B)	268.51	51.74	320.25

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9. From the following information for the month of January, 20X9, PREPARE Process-III cost accounts.

Opening WIP in Process-III	1,600 units at ₹ 24,000
Transfer from Process-II	55,400 units at ₹ 6,23,250
Transferred to warehouse	52,200 units
Closing WIP of Process-III	4,200 units
Units Scrapped	600 units
Direct material added in Process-III	₹ 2,12,400
Direct wages	₹ 96,420
Production overheads	₹ 56,400

Degree of completion:

	Opening Stock	Closing Stock	Scrap
Material	80%	70%	100%
Labour	60%	50%	70%
Overheads	60%	50%	70%

The normal loss in the process was 5% of the production and scrap was sold @ ₹ 5 per unit.

(Students may treat material transferred from Process – II as Material – A and fresh material used in Process – III as Material B)

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9. Statement of Equivalent Production

Process III

Input Details	Units	Output Particulars	Units	Equivalent Production					
				Material-A		Material-B		Labour & Overhead	
				%	Units	%	Units	%	Units
Opening WIP	1,600	Work on Op. WIP	1,600	-	-	20	320	40	640
Process-II Transfer	55,400	Introduced & completed during the month	50,600	100	50,600	100	50,600	100	50,600
		Normal loss (5% of 52,800 units)	2,640	-	-	-	-	-	-
		Closing WIP	4,200	100	4,200	70	2,940	50	2,100
		Abnormal Gain	(2,040)	100	(2,040)	100	(2,040)	100	(2,040)
	57,000		57,000		52,760		51,820		51,300

Working note:

Production units = Opening units + Units transferred from Process-II – Closing Units

= 1,600 units + 55,400 units – 4,200 units

= 52,800 units

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Statement of Cost

	Cost (₹)	Equivalent units	Cost per equivalent units (₹)
Material A (Transferred from previous process)	6,23,250		
Less: Scrap value of normal loss (2,640 units × ₹ 5)	(13,200)		
	6,10,050	52,760	11.5627
Material B	2,12,400	51,820	4.0988
Labour	96,420	51,300	1.8795
Overheads	56,400	51,300	1.0994
	9,75,270		18.6404

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Statement of apportionment of Process Cost

		Amount (₹)	Amount (₹)
Opening WIP	Material A		24,000
Completed opening WIP units-1600	Material B (320 units × ₹ 4.0988)	1311.62	
	Wages (640 units × ₹ 1.8795)	1202.88	
	Overheads (640 units × ₹ 1.0994)	703.62	3,218.12
Introduced & Completed- 50,600 units	50,600 units × ₹ 18.6404		9,43,204.24
Total cost of 52,200 finished goods units			9,70,422.36
Closing WIP units-4,200	Material A (4,200 units × ₹ 11.5627)		48,563.34
	Material B (2,940 units × ₹ 4.0988)		12,050.47
	Wages (2,100 units × ₹ 1.8795)		3,946.95
	Overheads (2,100 units × ₹ 1.0994)		2,308.74
			66,869.50
Abnormal gain units - 2,040	(2,040 units × ₹ 18.6404)		38026.42

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Process III A/c

Particulars		Units	Amount (₹)	Particulars		Units	Amount (₹)
To	Balance b/d	1,600	24,000	By	Normal loss	2,640	13,200
To	Process II A/c	55,400	6,23,250	By	Finished goods	52,200	9,70,422.36
To	Direct material		2,12,400	By	Closing WIP	4,200	66,874.06*
To	Direct wages		96,420				
To	Production overheads		56,400				
To	Abnormal gain	2,040	38,026.42				
		59,040	10,50,496.42			59,040	10,50,496.42

* Difference in figure due to rounding off has been adjusted with closing WIP