Case Scenarios

Question – 1	[Material Cost] [RTP – May24]

The purchase committee of A Ltd. has been entrusted to review the material procurement policy of the company. The chief marketing manager has appraised the committee that the company at present produces a single product X by using two raw materials A and B in the ratio of 3:2. Material A is perishable in nature and has to be used within 10 days from Goods received note (GRN) date otherwise material becomes obsolete. Material B is durable in nature and can be used even after one year. Material A is purchased from the local market withing 1 to 2 days of placing order. Material B, on the other hand, is purchased from neighboring state and it takes 2 to 4 days to receive the material in the store.

The purchase price of per kilogram of raw material A and B is ₹30 and ₹44 respectively exclusive of taxes. To place an order, the company has to incur an administrative cost of ₹1,200. Carrying cost for material A and B is 15% and 5% respectively. At present material A is purchased in a lot of 15,000 kg to avail 10% discount on market price. GST applicable for both the materials is 18% and the input tax credit is availed.

The sales department has provided an estimate that the company could sell 30,000 kg in January 2024 and also projected the same trend for the entire year.

The ratio of input and output is 5:3. Company works for 25 days in a month and production is carried out evenly.

The following queries/ calculations to be kept ready for purchase committees' reference:

Question – 1

For the month of January 2024, what would be the quantity of the materials to be requisitioned for both material A and B:

(a) 9,000 kg & 6,000 kg respectively
(b) 18,000 kg & 12,000 kg respectively
(c) 27,000 kg & 18,000 kg respectively
(d) 30,000 kg & 20,000 kg respectively

Question – 2

The economic order quantity (EOQ) for both the material A & B:

(a) 13,856 kg & 16,181 kg respectively

(b) 16,197 kg & 17,327 kg respectively
(c) 16,181 kg & 17,165 kg respectively
(d) 13,197 kg & 171,65 kg respectively

Question – 3

What would be the maximum stock level for material A:
(a) 18,200 kg
(b) 12,000 kg
(c) 16,000 kg
(d) 16,200 kg

Question – 4

Calculate saving/loss in purchase of material A if the purchase order quantity is equal to EOQ.
(a) Profit of ₹3,21,201
(b) Loss of ₹3,21,201
(c) Profit of ₹2,52,500
(d) Loss of ₹2,52,500

Question – 5

What would be the minimum stock level for material A:
(a) 1,800 kg
(b) 1,200 kg
(c) 600 kg
(d) 2,400 kg

1	2	3	4	5
D	A	B	B	C

Question – 2	**[Employee Cost] [RTP – May24]**

The board of the J Ltd. has been appraised by the General Manager (HR) that the employee attrition rate int eh company ahs increased. The following facts has been presented by the GM (HR):
(1) Training period of the new recruits is 50,000 hours. During this period their productivity is 60% of the experienced workers. Time required by an experienced worker is 10 hours per unit.
(2) 20% of the output during training period was defective. Cost of rectification of a defective unit was ₹25.
(3) Potential productive hours lost due to delay in recruitment were 1,00,000 hours.
(4) Selling price per unit is ₹180 and P/V ratio is 20%.
(5) Settlement cost of the workers leaving the organization was ₹1,83,480
(6) Recruitment cost was ₹1,56,340
(7) Training cost was ₹1,13,180

You being an associate finance to GM (HR), has been asked the following questions:

Question – 1

How much quantity of output is lost due to labour turnover?

(a) 10,000 units
(b) 8,000 units
(c) 12,000 units
(d) 12,600 units

Question – 2

How much loss in the form of contribution, the company incurred due to labour turnover?

(a) ₹4,32,000
(b) ₹4,20,000
(c) ₹4,36,000
(d) ₹4,28,000

Question – 3

What is the cost of repairing defective units.

(a) ₹75,000
(b) ₹15,000
(c) ₹50,00
(d) ₹25,000

Question – 4

Calculate the profit lost by the company due to increased labour turnover.

(a) ₹7,50,000
(b) ₹15,00,000
(c) ₹5,00,000
(d) ₹9,00,000

Question – 5

How much quantity of output is lost due to inexperience of the new worker?

(a) 1,000 units
(b) 2,600 units
(c) 2,000 units
(d) 12,600 units

1	2	3	4	5
C	A	B	D	C

Question – 3	[Overheads]

Litto Limited is a manufacturing company which has as a machine shop cost center that contains three machines of equal capacities. To operate these three machines nine operators are required i.e. three operators on each machine. Operators are paid ₹20 per hour. The factory works for forty eight hours in a week which includes 4 hours set up time. The work is jointly done by operators. The operators are paid fully for the forty eight hours. In additions they are paid a bonus of 10 percent of productive time. Costs are reported for this company on the basis of thirteen four-weekly period.

The company for the purpose of computing machine hour rate includes the direct wages of the operator and also recoups the factory overheads allocated to the machines. The following details of factory overheads applicable to the cost centre are available:

- Depreciation 10% per annum on original cost of the machine. Original cos tof each machine is ₹52,000.
- Maintenance and repair per week per machine is ₹60.
- Consumables stores per week per machine are ₹75
- Power: 20 units per hour per machine at the rate of 80 paise per unit. No power is used during the set-up hours.
- Apportionment to the cost centre: Rent per annum ₹5,400, Heat and Light per annum ₹9,720, foreman's salary per annum ₹12,960 and other miscellaneous expenditure per annum ₹18,000.

Question – 1

What is the effective machine hour for four-week period?

(a) 170 hours
(b) 176 hours
(c) 189 hours
(d) 192 hours

Question – 2

What is the bonus charges and power expenses for four-week period?

(a) ₹1,056 and ₹2,816
(b) ₹1,562 and ₹3,560
(c) ₹1,240 and ₹3,325
(d) ₹860 and ₹2,450

Question – 3

What is the standing charges for four-week period?

(a) ₹12,357
(b) ₹10,450
(c) ₹13,757

(d) ₹14,226

Question – 4

What is the machine expenses for four-week period?

(a) ₹2,500
(b) ₹3,450
(c) ₹3,986
(d) ₹3,756

Question – 5

What is the machine hour rate?

(a) ₹99.51
(b) ₹92.25
(c) ₹105.22
(d) ₹86.90

1	2	3	4	5
B	A	C	D	A

Question – 4	**[Overheads] [RTP – May24]**

During half year ending inter departmental review meeting of P Ltd., cost variance report was discussed and the performance of the departments were assessed. The following figures were presented.

For a period of first six months of the financial year, following information were extracted from the books:

Actual production overheads	₹34,08,000

The above amount is inclusive of the following payments made:

Paid as per court's order	₹4,50,000
Expenses of previous year booked in current year	₹4,20,000
Obsolete stores written off	₹36,000

Production and sales data for the six months are as under:

Production:	
Finished goods	1,10,000 units
Work-in-progress	80,000 units
(50% complete in every respect)	
Sale:	
Finished goods	90,000 units

Machine hours work during the period was 3,000 hours.

At the time of preparation of revenue budget, it was estimated that a total of ₹50,40,000 would be required for budgeted machine hours of 6,000 as production overheads for the entire year.
During the meeting, a data analytic report revealed that 40% of the over/under absorption was due to defective production policies and the balance was attributable to increase in costs.

You were also present at the meeting; the chairperson of the meeting has asked you to be ready with the following for the performance appraisal of the departmental heads:

Question – 1

How much was the budgeted machine hour rate used to recover overhead?

(a) ₹760
(b) ₹820
(c) ₹780
(d) ₹840

Question – 2

How much amount of production overhead has been recovered (absorbed) upto the end of half year end?

(a) ₹25,20,000
(b) ₹34,08,000
(c) ₹24,00,000
(d) ₹24,60,000

Question – 3

What is the amount of overhead under/over absorbed?

(a) ₹1,18,000 over absorbed
(b) ₹1,18,000 under absorbed
(c) ₹18,000 over absorbed
(d) ₹18,000 under absorbed

Question – 4

What is the supplementary rate for apportionment of over absorbed overheads over WIP, Finished goods and Cost of sales?

(a) ₹0.315 per unit
(b) ₹0.472 per unit
(c) ₹0.787 per unit
(d) ₹1 per unit

Question – 5

What is the amount of over absorbed overheads apportioned to work in progress?

(a) ₹9,440
(b) ₹42,480
(c) ₹18,880
(d) ₹70,800

1	2	3	4	5
D	A	A	B	C

Question – 5 **[Activity Based Costing]**

'Humara – Apna' bank offers three products, viz. deposits, Loans and Credit Cards. The bank has selected 4 activities for a detailed budgeting exercise, following activity based costing method. The bank wants to know the product wise total cost per unit for the selected activities, so that price may be fixed accordingly. The following information is made available to formulate the budget:

Activity	Present Cost (₹)	Estimation for the budget period
ATM Services:		
(a) Machine Maintenance	4,00,000	All fixed, no change
(b) Rents	2,00,000	Fully fixed, no change
(c) Currency replenishment cost	1,00,000	Expected to double during budget
	7,00,000	(This activity is driven by no. of ATM transactions)
Computer Processing	5,00,000	Half this amount is fixed and no change is expected. The variable portion is expected to increase to three times the current level. (This activity is driven by the number of computer transactions)
Issuing Statements	18,00,000	Presently, 3 lakh statements are made. In the budget period, 5 lakh statements are expected. For every, increase of one lakh statement, one lakh rupees is the budgeted increase. (This activity is driven by the number of statements)
Computer Inquiries	2,00,000	Estimated to increase by 80% during the budgeted period. (This activity is driven by telephone minutes)

The activity drivers and their budgeted quantities are given below:

Activity Drivers	Deposits	Loans	Credit Cards

No. of ATM transactions	1,50,000	-	50,000
No. of Computer Processing Transactions	15,00,000	2,00,000	3,00,000
No. of Statements to be issued	3,50,000	50,000	1,00,000
Telephone Minutes	3,60,000	1,80,000	1,80,000

The bank budgets a volume of 58,600 deposit accounts, 13,000 loan accounts and 14,000 credit card accounts.

Question – 1

The budgeted rate for ATM service activity is:

(a) ₹4
(b) ₹2
(c) ₹1
(d) ₹0.50

Question – 2

The budgeted rate for computer processing activity is:

(a) ₹4
(b) ₹2
(c) ₹1
(d) ₹0.50

Question – 3

The budgeted rate for issuing statement activity is:

(a) ₹4
(b) ₹2
(c) ₹1
(d) ₹0.50

Question – 4

The budgeted rate for computer inquiries activity is:

(a) ₹4
(b) ₹2
(c) ₹1
(d) ₹0.50

Question – 5

Total cost for credit cards as per activity based costing is:

(a) ₹3,90,000
(b) ₹8,40,000
(c) ₹15,60,000

(d) ₹29,30,000

1	2	3	4	5
A	D	A	D	B

Question – 6 **[Activity Based Costing]**

The sales department of A Limited is analysing the customer profitability for its Product Z. It has decided to analyse the profitability of its five new customers using activity-based costing method. It buys Product Z at ₹5,400 per unit and sells to retail customers at a listed price of ₹6,480 per unit. The data pertaining to five customers are:

	Customers				
	A	B	C	D	E
Units sold	4,5000	6,000	9,500	7,500	12,750
Listed selling price	₹6,480	₹6,480	₹6,480	₹6,480	₹6,480
Actual selling price	₹6,480	₹6,372	₹5,940	₹6,264	₹5,832
Number of purchase orders	15	25	30	25	30
Number of Customer visits	2	3	6	2	3
Number of deliveries	10	30	60	40	20
Kilometers travelled per delivery	20	6	5	10	30
Number of expedited deliveries	0	0	0	0	1

Its five activates and their cost drivers are:

Activity	Cost Driver Rate
Order taking	₹4,500 per purchase order
Customer visits	₹3,600 per customer visit
Deliveries	₹7.50 per delivery km travelled
Product handling	₹22.50 per case sold
Expedited deliveries	₹13,500 per expedited delivery

You have been assigned the following task of computing different cost information for managerial decision making.

Question – 1

How much cost on customer visit is incurred on customer E?

(a) ₹7,200
(b) ₹10,800
(c) ₹21,600
(d) ₹3,600

Question – 2

What is the cost of goods sold for customer D?

(a) ₹2,43,00,000
(b) ₹3,24,00,000
(c) ₹5,13,00,000
(d) ₹4,05,00,000

Question – 3

How much is the cost of expediting delivery for customer A?

(a) ₹13,500
(b) ₹27,000
(c) ₹40,500
(d) ₹0

Question – 4

Compute the customer-level operating income of each of customers A.

(a) ₹55,72,350
(b) ₹46,82,550
(c) ₹47,57,400
(d) ₹50,57,325

Question – 5

Compute the customer-level operating income of each of five retail customer D and E.

(a) ₹46,82,550 & ₹50,65,720
(b) ₹55,72,350 & ₹46,85,500
(c) ₹47,57,400 & ₹55,72,350
(d) ₹61,88,550 & ₹50,57,325

1	2	3	4	5
B	D	C	B	D

Question – 7	**[Cost Sheet] [MTP – May24]**

M Ltd. is producing a single product and may expand into product diversification in next one to two years. M Ltd. is amongst a labour-intensive company where majority of processes are done manually. Employee cost is a major cost element in the total cost of the company. The company conventionally uses performance parameters Earnings per manshift (EMS) to measure cost paid to an employee for a shift of 8 hours, and Output per manshift (OMS) to measure an employee's output in a shift of 8 hours.

The Chief Manager (Finance) of the company has emailed you few information related to the last month. The email contains the following data related to the last month:

During the last month, the company has produced 2,34,000 tonnes of output. Expenditures for the last months are:

(i) Raw materials consumed ₹50,00,000
(ii) Power consumed 13,000 Kwh @ ₹8 per Kwh to run the machines for production.
(iii) Diesels consumed 2,000 litres @ ₹93 per litre to run power generator used as alternative or backup for power cuts.
(iv) Wages & salary paid – ₹6,40,00,000
(v) Gratuity & leave encashment paid – ₹64,20,000
(vi) Hiring charges paid for HEMM- ₹30,00,000. HEMM are directly used in production.
(vii) Hiring charges paid for cars used for official purpose – ₹66,000
(viii) Reimbursement of diesel cost for the cars – ₹22,000
(ix) The hiring of cars attracts GST under RCM @5% without credit.
(x) Maintenance cost paid for weighing bridge (used for weighing of final goods at the time of dispatch) – ₹12,000
(xi) AMC cost of CCTV installed at weighing bridge (used for weighing of final goods at the time of dispatch) and factory premises is ₹8,000 and ₹18,000 per month respectively.
(xii) TA/ DA and hotel bill paid for sales manager- ₹36,000
(xiii) The company has 1,800 employees works for 26 days in a month.

You are asked to calculate the followings:

Question – 1

What is the amount of prime cost incurred during the last month:

(a) ₹7,54,20,000
(b) ₹7,57,10,000
(c) ₹7,56,06,000
(d) ₹7,87,10,000

Question – 2

What is the total and per shift cost of production for last month:

(a) ₹7,87,10,000 and ₹336.37 respectively
(b) ₹7,87,10,000 and ₹1,681.84 respectively
(c) ₹7,87,28,000 and ₹1,682.22 respectively
(d) ₹7,87,28,000 and ₹336.44 respectively

Question – 3

What is the value of administrative cost incurred during the last month:

(a) ₹92,400
(b) ₹88,000
(c) ₹1,48,400
(d) ₹1,44,000

Question – 4

What is the value of selling and distribution cost and total cost of sales:
(a) ₹36,000 & ₹7,88,76,400 respectively
(b) ₹56,000 & ₹7,88,76,400 respectively
(c) ₹36,000 & ₹7,88,72,000 respectively
(d) ₹56,000 & ₹7,88,72,000 respectively

Question – 5

What is the value EMS and OMS for the last month:
(a) ₹1,504.70 & 5 tonnes respectively
(b) ₹1,367.52 & 5 tonnes respectively
(c) ₹1,504.70 & 4.37 tonnes respectively
(d) ₹1,367.52 & 4.37 tonnes respectively

1	2	3	4	5
D	C	A	B	A

Question – 8 **[Cost Sheet]**

P Ltd. has gathered cost information from ledgers and other sources for the year ended 31st December 2023. The information are tabulated below:

Particulars	Amount (₹)	Amount (₹)
Raw material purchased		5,00,00,000
Freight inward		9,20,600
Wages paid to factory workers		25,20,000
Royalty paid for production		1,80,000
Amount paid for power & fuel		3,50,000
Job charges paid to job worders		3,10,000
Stores and spares consumed		1,10,000
Depreciation on office building		50,000
Repairs & maintenance paid for:		
- Plant & Machinery	40,000	
- Sales office building	20,000	60,000
Insurance premium paid for:		
- Plant & Machinery	28,200	
- Factory building	18,800	47,000

Expenses paid for quality control check		18,000
Research & Development cost paid for improvement in production process		20,000
Expenses paid for pollution control and engineering & maintenance		36,000
Salary paid to Sales & marketing managers		5,60,000
Salary paid to General Manager		6,40,000
Packing cost paid for:		
- Primary packing necessary to maintain quality	46,000	
- For re-distribution of finished goods	80,000	1,26,000
Fee paid to independent directors		1,20,000
Performance bonus paid to sales staffs		1,20,000
Value of stock as on 1st April of last year:		
- Raw materials	10,00,000	
- Work-in-process	8,60,000	
- Finished goods	12,00,000	30,60,000
Value of stock as on 31st March of current year:		
- Raw materials	8,40,000	
- Work-in-process	6,60,000	
- Finished goods	10,50,000	25,50,000

Amount realized by selling of scrap and waste generated during manufacturing process - ₹48,000.

The board meeting is scheduled to be held in next week and you being an associate to the chief cost controller of the company, has been asked to be prepared with the following figures:

Question – 1

How much is the prime cost of the company?

(a) ₹5,10,80,600
(b) ₹5,44,40,600
(c) 15,36,00,600
(d) ₹5,19,20,600

Question – 2

How much is the cost of production?

(a) ₹5,49,09,600
(b) ₹5,50,59,600
(c) ₹5,48,73,600
(d) ₹5,50,59,000

Question – 3

What is the value of cost of goods sold?

(a) ₹5,49,09,600
(b) ₹5,50,59,600
(c) ₹5,48,73,600
(d) ₹5,50,59,000

Question – 4

How much is the factory cost?

(a) ₹5,49,09,600
(b) ₹5,50,59,600
(c) ₹5,48,73,600
(d) ₹5,50,59,000

Question – 5

What is the value of cost of sales?

(a) ₹5,66,49,600
(b) ₹5,50,59,600
(c) ₹5,48,73,600
(d) ₹5,50,59,000

1	2	3	4	5
B	A	B	C	A

Question – 9	[Batch Costing]

Arnav Ltd. operates in beverages industry where it manufactures soft-drink in three sizes of Large (3 litres), Medium (1.5 litres) and Small (600 ml) bottles. The products are processed in batches. The 5,000 litres capacity processing plant consumes electricity of 90 kilowatts per hour and a batch takes 1 hours 45 minutes to complete. Only symmetric size of products can be processed at a time. The machine set-up takes 15 minutes to get ready for next batch processing. During the set-up power consumption is only 20%.

(i) The current price of Large, Medium and Small are ₹150, ₹90 and ₹50 respectively.
(ii) To product a litre of beverage, 14 litres of raw material–W and 25 ml of material–C are required which costs ₹0.50 and ₹1,000 per litre respectively.
(iii) 20 direct workers are required. The workers are paid ₹880 for 8 hours shift of work.
(iv) The average packing cost per bottle is ₹3
(v) Power cost is ₹7 per kilowatt-hour (Kwh)
(vi) Other variable cost is ₹30,000 per batch
(vii) Fixed cost (administration and marketing) is ₹4,90,00,000.
(viii) The holding cost is ₹1 per bottle per annum.

The marketing team has surveyed the following demand (bottle) of the product:

Large	Medium	Small
3,00,000	7,50,000	20,00,000

The following information has been sought from you the purpose of performance review meeting:

Question – 1

Number of large size bottles that can be processed in a batch?

(a) 5,000 bottles
(b) 1,666 bottles
(c) 3,333 bottles
(d) 8,333 bottles

Question – 2

Total number of batches to be run to process medium size bottles

(a) 180
(b) 225
(c) 240
(d) 645

Question – 3

Material-W required for small size bottles.

(a) 1,26,000 litres
(b) 1,68,000 litres
(c) 1,57,500 litres
(d) 1,51,50,000 litres

Question – 4

Profit/loss per batch:

(a) 7,72,17,370
(b) 5,52,54,550
(c) 2,82,17,370
(d) 4,50,25,225

Question – 5

What is the Economic Batch Quantity (EBQ) small bottles?

(a) 1,34,234 bottles
(b) 2,12,243 bottles
(c) 3,46,592 bottles
(d) 4,12,268 bottles

1	2	3	4	5
B	B	B	C	C

Question – 10 **[Service Costing]**

A LMV Pvt. Ltd., operates cab/car rental service in Delhi/NCR. It provides its service to the offices of Noida, Gurugram and Faridabad. At present it operates CNG fueled cars but it is also considering to upgrade these into Electric vehicles (EV). The details related with the owning of CNG & EV propelled cars are as tabulated below:

Particulars	CNG Car	EV Car
Car purchase price (₹)	9,20,000	15,20,000
Govt. subsidy on purchase of car (₹)	-	1,50,000
Life of the car	15 years	10 years
Residual value (₹)	95,000	1,70,000
Mileage	20 km/kg	240 km per charge
Electricity consumption per full charged	-	30 Kwh
CNG cost per Kg (₹)	60	-
Power cost per Kwh (₹)	-	7.60
Annual Maintenance cost (₹)	8,000	5,200
Annual insurance cost (₹)	7,600	14,600
Tyre replacement cost in every 5 year (₹)	16,000	16,000
Battery replacement cost in every 8 years (₹)	12,000	5,40,000

Apart from the above, the following are the additional information:

Particulars	
Average distance covered by a car in a month	1,500 km
Driver's salary (₹)	20,000 p.m.
Garage rent per car (₹)	4,500 p.m.
Share of office and administration cost per car (₹)	1,500 p.m.

You have been approached by the management of A LMV Pvt. Ltd. for consultation on the two options of operating the cab service. The expected questions that may be asked by the management are as follows:

Question - 1

What would be the depreciable value of CNG car and EV car respectively?

(a) ₹13,50,000 and ₹14,40,000
(b) ₹15,20,000 and ₹8,25,000
(c) ₹8,25,000 and ₹14,40,000
(d) ₹8,25,000 and ₹12,00,000

Question – 2

What would be the monthly cost of fuel and electricity for an CNG and EV care respectively?

(a) ₹4,500 and ₹1,425
(b) ₹1,500 and ₹4,500
(c) ₹1,525 and ₹1,450
(d) ₹1,525 and ₹1,425

Question – 3

What would be the total cost to be incurred for replacement of tyres for CNG and EV care respectively?

(a) ₹32,000 and ₹24,000
(b) ₹12,000 and ₹32,000
(c) ₹32,000 and ₹16,000
(d) ₹16,000 and ₹12,000

Question – 4

What would be the total cost to be incurred for replacement of battery for CNG and EV car respectively?

(a) ₹5,40,000 and ₹12,000
(b) ₹12,000 and ₹5,40,000
(c) ₹2,00,000 and ₹12,000
(d) ₹1,00,000 and ₹2,00,000

Question – 5

What would be the operating cost of vehicle per month per car for both CNG and EV options?

(a) ₹36,627.78 and ₹43,708.33
(b) ₹36,627.78 and ₹48,523.26
(c) ₹48,523.26 and ₹28,150.29
(d) ₹48,523.26 and ₹28,510.29

1	2	3	4	5
D	A	C	B	A

Question – 11 **[Process Costing] [MTP – May24]**

Arnav Ltd. manufactures chemical solutions used in paint and adhesive products. Chemical solutions are produced in different processes. Some of the processes are hazardous in nature which may results in fire accidents.

At the end of the last month, one fire accident occurred in the factory. The fire destroyed some of the paper files containing records of the process operations for the month.

You being an associate to the Chief Manager (finance), are assigned to prepare the process accounts for the month during which the fire occurred. From the documents and files of other sources, following information could be retrieved:

Opening work-in-process at the beginning of the month was 500 litres, 80% complete for labour and 60% complete for overheads. Opening work-in-process was valued at ₹2,78,000.

Closing work-in-process at the end of the month was 100 litres, 20% complete for labour and 10% complete for overheads.

Normal loss is 10% of input(fresh) and total losses during the month were 800 litres partly due to the fire damage.

Output transferred to finished goods was 3,400 litres

Losses have a scrap value fo ₹20 per litre

All raw material are added at the commencement of the process.

The cost per equivalent unit is ₹660 for the month made up as follows:
Raw material ₹300; labour ₹200; Overheads ₹160.

The company uses FIFO method to value work-in-process and finished goods. The following information are required for managerial decisions:

Question – 1

How much quantity of raw material introduced during the month?

(a) 4,300 litres
(b) 3,500 litres
(c) 4,200 litres
(d) 3,800 litres

Question – 2

The quantity of normal loss and abnormal loss are:

(a) Normal loss – 380 litres and abnormal loss – 420 litres
(b) Normal loss – 350 litres and abnormal loss – 450 litres
(c) Normal loss – 430 litres and abnormal loss – 370 litres
(d) Normal loss – 420 litres and abnormal loss – 380 litres

Question – 3

Value for raw material added to the process during the month is:

(a) ₹10,10,000
(b) ₹10,33,600
(c) ₹10,18,400
(d) ₹10,20,000

Question – 4

Value of labour and overhead in closing Work-in-process are:

(a) ₹4,000 & ₹1,600 respectively
(b) ₹20,000 & ₹16,000 respectively
(c) ₹16,000 & ₹9,000 respectively
(d) ₹13,200 & ₹6,600 respectively

Question – 5

Value of output transferred to finished goods is:

(a) ₹22,57,200
(b) ₹20,06,400
(c) ₹22,44,000
(d) ₹19,27,.200

1	2	3	4	5
D	A	B	A	C

Question – 12 [Process Costing]

The following data are available in respect of Process-I for January 2024:

(1) Opening stock of work in process: 600 units at a total cost of ₹4,200
(2) Degree of completion of opening work in process:

Material	100%
Labour	60%
Overheads	60%

(3) Input of materials at a total cost of ₹55,200 for 9,200 units.
(4) Direct wages incurred ₹18,600
(5) Overheads ₹8,630
(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:

Materials	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 ₹6 per unit

You are required to be ready with the following information:

Question – 1

What is the equivalent units for labour?

(a) 9,800 units

(b) 8,808 units

(c) 9,030 units

(d) 8,838 units

Question – 2

What is the total cost of per equivalent units?

(a) ₹9.08

(b) ₹10.10

(c) ₹8.08

(d) ₹8.68

Question – 3

What is the total cost of abnormal gain?

(a) ₹1,743.36

(b) ₹1,209.52

(c) ₹2,506.25

(d) ₹3,728.16

Question – 4

What is the total cost of closing work in process?

(a) ₹5,709.20

(b) ₹5,809.20

(c) ₹5,806.20

(d) ₹5,734.80

Question – 5

What is the cost of the units to be transferred to the next process using the FIFO method?

(a) ₹50,900.15

(b) ₹80,303.20

(c) ₹80,800.36

(d) ₹50,300.80

1	2	3	4	5
D	A	A	A	B

Question – 13 **[Joint & By-Product]**

A company processes a raw material in its Department 1 to produce three products, viz. A, B and X at the same split-off stage. During a period 1,80,000 kgs of raw materials were processed in Department 1 at a total cost of ₹12,88,000 and the resultant output of A, B and X were 18,000 kgs, 10,000 kgs and 54,000 kgs respectively. a and B were further processed in Department 2 at a cost of ₹1,80,000 and ₹1,50,000 respectively. Joint Cost will be apportioned on the basis of sale value at split off point.

X was further processed in Department 3 at a cost of ₹1,08,000. There is no waste in further processing. The details of sales effected during the, period were as under:

	A	B	X
Quantity Sold (Kgs)	17,000	5,000	44,000
Sales Value (₹)	12,24,000	2,50,000	7,92,000

There were no opening stocks. If these products were sold at split-off stage, the selling prices of A, B and X would have been ₹50, ₹40 and ₹10 per kg respectively.

Question – 1

The share of joint cost of product A is:

(a) ₹2,80,000
(b) ₹3,78,000
(c) ₹5,24,000
(d) ₹6,30,000

Question – 2

The share of joint cost of product B is:

(a) ₹2,80,000
(b) ₹3,78,000
(c) ₹5,24,000
(d) ₹6,30,000

Question – 3

The share of joint cost of product X is:

(a) ₹2,80,000
(b) ₹3,78,000
(c) ₹5,24,000
(d) ₹6,30,000

Question – 4

The profit of product A for the given period is:

(a) ₹35,000
(b) ₹3,96,000
(c) ₹4,59,000
(d) ₹5,41,000

Question – 5

The profit of product X for the given period is:

(a) ₹35,000
(b) ₹3,96,000
(c) ₹4,59,000
(d) ₹5,41,000

1	2	3	4	5
D	A	B	C	B

Question – 14 **[Marginal Costing] [MTP – May24]**

A meeting of the heads of departments of the Arnav Ltd. has been called to review the operating performance of the company in the last financial year. The head of the production department appraised that during the last year the company could operate at 70% capacity level but in the coming financial year 95% capacity level can be achieved if an additional amount of ₹100 crore on capex and working capital is incurred.

The head of the finance department has presented that during the last financial year the company and a P/V ratio of 40%, margin of safety and the break-even were ₹50 crore and ₹200 crore respectively.

To the reply to the proposal of increasing the production capacity level to 95%, the head of the finance department has informed that this could be achieved if the selling price and variable cost are reduced by 8% and 5% of sales respectively. Fixed cost will also increase by ₹20 crore due to increased depreciation on additional assets. The additional capital will be arranged at a cost of 15% p.a. from a bank.

In the coming financial year, it has been aimed to achieve an additional profit of ₹10 crore over and above the last year's profit after adjusting the interest cost on the additional capital.

The following points is required to be calculated on urgent basis to put the same in the meeting. You being an assistant to the head of finance, has been asked the followings:

Question – 1

What will be the revised sales for the coming financial year?

(a) ₹322.22 crore
(b) ₹311.11 crore
(c) ₹300.00 crore
(d) ₹324.24 crore

Question – 2

What will be the revised break-even point for the coming financial year?

(a) ₹222.22 crore
(b) ₹252.22 crore
(c) ₹244.44 crore
(d) ₹255.56 crore

Question – 3

What will be the revised margin of safety for the coming financial year?

(a) ₹100 crore
(b) ₹58.89 crore
(c) ₹55.56 crore
(d) ₹66.66 crore

Question – 4

The profit of the last year and for the coming year are:

(a) ₹50 crore and ₹95 crore respectively
(b) ₹20 crore and ₹65 crore respectively
(c) ₹20 crore and ₹30 crore respectively
(d) ₹45 crore and ₹66.66 crore respectively

Question – 5

The total cost of the last year and for the coming year are:

(a) ₹230 crore and ₹292.22 crore
(b) ₹230 crore and ₹275 crore
(c) ₹220 crore and ₹282.22 crore
(d) ₹220 crore and ₹292.22 crore

1	2	3	4	5
A	D	D	C	A

Question – 15	**[Marginal Costing]**

Miniso Pvt Ltd a company engaged in the business of manufacturing wireless Bluetooth earphones. The company wishes to track its operating profitability and the margin it needs to maintain to sustain profitability in the long run. Further the company has adopted the marginal costing technique and define operational levels. In this regard the company has provided the following information for the current year:

Opening stock of earphones	-	30,000 units
Selling price of the earphones	-	₹450 per unit
Variable costs incurred in manufacture	-	₹270 per unit
Units produced during the previous year	-	1,80,000 units
Expected production for the current year	-	2,25,000 units
Expected sales for the current year	-	2,40,000 units
Fixed cost per unit for last year was	-	₹60 per unit
Expected rise in fixed cost	-	10%
Expected increase in variable cost	-	25%

Based on the above information available, the following needs to be determined:

Question – 1

The profit that the company will make on achieving its targeted sales amounts to:

(a) ₹1,51,20,000
(b) ₹1,62,00,000
(c) ₹1,71,45,000
(d) ₹1,72,00,000

Question – 2

The units to be sold by the company to achieve Break-even is:

(a) 57,600 units
(b) 87,600 units
(c) 1,05,600 units
(d) 96,000 units

Question – 3

The total fixed cost for the current year post the cost increase amounts to:

(a) ₹1,08,00,000
(b) ₹1,48,50,000
(c) ₹1,18,80,000
(d) ₹1,44,00,000

Question – 4

The quantity of closing stock and its value amounts to:

(a) Closing stock in units – Nil and Value – Nil

(b) Closing stock in units – 15,000 and Value - ₹40,50,000
(c) Closing stock in units – 15,000 and Value - ₹50,62,500
(d) Closing stock in units – 15,000 and Value - ₹58,05,000

Question – 5

Margin of safety in units amounts to:
(a) 87,600 units
(b) 1,52,400 units
(c) 1,62,000 units
(d) 1,60,000 units

1	2	3	4	5
C	B	C	C	B

Question – 16 **[Marginal Costing]**

The analysis of cost sheet of A Ltd. for the last financial year has revealed the following information for its product R:

Elements of cost	Variable Cost Portion	Fixed Cost
Direct Material	30% of cost of goods sold	-
Direct Labour	15% of cost of goods sold	-
Factory overheads	10% of cost of goods sold	₹2,30,000
General & Administration Overheads	2% of cost of goods sold	₹71,000
Selling & Distribution Overhead	4% of cost of sales	₹68,000

Last year 5,000 units were sold at ₹185 per unit.
You being an associate to cost controller of the A Ltd., is expected to answer the following:

Question -1

What is the cost of goods sold for the last year?
(a) ₹7,20,000
(b) ₹7,00,000
(c) ₹7,10,000
(d) ₹7,30,000

Question – 2

What is the cost of sales for the last year?
(a) ₹8,00,000
(b) ₹8,20,000
(c) ₹8,10,000
(d) ₹7,90,000

Question – 3

The total fixed cost is:

(a) ₹3,79,000
(b) ₹3,89,000
(c) ₹3,59,000
(d) ₹3,69,000

Question – 4

Calculate the Break-even sales (in rupees)

(a) ₹6,90,882
(b) ₹7,90,000
(c) ₹3,89,000
(d) ₹5,48,692

Question – 5

What is the Margin of Safety (in %)

(a) 26.58%
(b) 25.31%
(c) 53.41%
(d) 34.25%

1	2	3	4	5
B	A	D	A	B

Question – 17 **[Standard Costing] [MTP – May24]**

K Ltd. is a manufacturer of a single product A. 8,000 units of the product A has been produced in the month of March 2024. At the beginning of the year a total 1,20,000 units of the product-A has been planned for production. The cost department has provided the following estimates of overheads:

Particulars	Amount (₹)
Fixed	12,00,000
Semi-variable	1,80,000
Variable	6,00,000

Semi-variable charges are considered to include 60 per cent expenses of fixed nature and 40 per cent of variable character.

The records of the production department shows that the company could have operated for 20 days but there was a festival holiday during the month.

The actual cost data for the month of March 2024 are as follows:

Particulars	Amount (₹)

Fixed	1,10,000
Semi-variable	19,200
Variable	48,000

The cost department of the company is now preparing a cost variance report for managerial information and action. You being an accounts officer of the company are asked to calculate the following information for preparation of the variance report:

Question – 1

What is the amount of variable overhead cost variance for the month of March 2024:

(a) ₹10,200 (A)
(b) ₹10,400 (A)
(c) ₹10,800 (A)
(d) ₹10,880 (A)

Question – 2

What is the amount of fixed overhead volume variance for the month of March:

(a) ₹9,000 (F)
(b) ₹9,000 (A)
(c) ₹21,800 (A)
(d) ₹11,000 (A)

Question – 3

What is the amount of fixed overhead expenditure variance for the month of March:

(a) ₹21,520 (A)
(b) ₹21,500 (A)
(c) ₹21,400 (A)
(d) ₹21,480 (A)

Question – 4

What is the amount of fixed overhead calendar variance for the month of March:

(a) ₹5,400 (A)
(b) ₹5,450 (A)
(c) ₹5,480 (A)
(d) ₹5,420 (A)

Question – 5

What is the amount of fixed overhead cost variance for the month of March:

(a) ₹43,220 (A)
(b) ₹43,300 (A)
(c) ₹43,200 (A)

(d) ₹43,380 (A)

1	2	3	4	5
D	C	A	B	A

Question – 18 **[Budget & Budgetary Control]**

SR Ltd. is a manufacturer of Garments. For the first three months of financial year 2022-23 commencing on 1st April, 2022, production will be constrained by direct labour. It is estimated that only 12,000 hours of direct labour hours will be available in each month.

For market reasons, production of either of the two garments must be at least 25% of the production of the other. Estimated cost and revenue per garment are as follows:

	Shirt (₹)	Short (₹)
Sales price	60	44
Raw materials		
Fabric @12 per metre	24	12
Dyes and cotton	6	4
Direct labour @8 per hour	8	4
Fixed Overhead @4 per hour	4	2
Profit	18	22

From the month of July 2022 direct labour will no longer be a constraint. The company expects to be able to sell 15,000 shirts and 20,000 shorts in July 2022. There will be no opening stock at the beginning of July 2022.

Sales volumes are expected to grow at 10% per month cumulatively thereafter throughout the year. Following additional information is available:

- The company intends to carry stock of finished garments sufficient to meet 40% of the next month's sale from July 2022 onwards.
- The estimated selling price will be same as above.

Question – 1

The contribution per labour hour for shirt and short is:

(a) ₹22 and ₹24 respectively
(b) ₹22 and ₹48 respectively
(c) ₹44 and ₹24 respectively
(d) ₹44 and ₹48 respectively

Question – 2

The number of shirts to be manufactures is:

(a) 4,000

(b) 8,000
(c) 12,000
(d) 16,000

Question – 3

The number of shorts to be manufactures is:
(a) 4,000
(b) 8,000
(c) 12,000
(d) 16,000

Question – 4

The amount of sales for shirt for month of august is:
(a) ₹9,00,000
(b) ₹9,90,000
(c) ₹8,80,000
(d) ₹9,68,000

Question – 5

The number of units to be manufactured of short for august is:
(a) 21,600
(b) 28,800
(c) 22,880
(d) 25,168

1	2	3	4	5
B	A	D	B	C

Question – 19 **[Material Cost] [RTP – Sep24]**

'Axe Trade', an unregistered supplier under GST, purchased material from Vye Ltd. which is registered supplier under GST. During the month of June 2024, the Axe Traders has purchased a lot of 5,000 units on credit from Vye Ltd. The information related to the purchase are as follows:

Listed price of one lot of 5,000 units	- ₹2,50,000
Trade discount	- @ 10% on listed price
CGST and SGST (Credit available)	- 18% (9% CGST + 9% SGST)
Cash discount	- @ 10%
(Will be given only if payment is made within 30 days.)	
Toll Tax paid	₹5,000
Freight and Insurance	₹17,220

Demurrage paid to transporter	₹5,000
Commission and brokerage on purchases	₹10,000
Amount deposited for returnable containers	₹30,000
Amount of refund on returning the container	₹20,000
Other Expenses	@ 2% of total cost

A 20% shortage in material on receipt is expected considering the nature of the raw material.
The payment to the supplier was made within 21 days of the purchases.

Question - 1

If Axe Traders pays the supplier within 30 days of purchase, then, what is the total amount of cash discount received from the supplier and how it is treated to calculate material cost?

(a) ₹25,000 & it will not be deducted from the material cost
(b) ₹26,550 & it will be deducted from the material cost
(c) ₹26,550 & it will not be deducted from the material cost
(d) ₹22,500 & it will not be deducted from the material cost

Question - 2

What will be the amount of other expenses and how it is treated in material cost?

(a) ₹6,154.40 & it will be added with the material cost
(b) ₹6,280.00 & it will be added with the material cost
(c) ₹5,344.40 & it will be added with the material cost
(d) ₹5,453.47 & it will not be added with the material cost

Question - 3

What is the amount of GST and how will it be treated in cost sheet of Axe Traders?

(a) ₹40,500 & it will not be added with material cost
(b) ₹40,500 & it will be added with material cost
(c) ₹45,000 & it will not be added with material cost
(d) ₹45,000 & it will be added with material cost

Question - 4

What is the total material cost chargeable in the cost sheet of Axe Traders?

(a) ₹3,14,000
(b) ₹2,73,500
(c) ₹2,72,673
(d) ₹3,13,874

Question - 5

The number of goods units and cost per unit of the materials received are:

(a) 5,000 units and ₹62.80

(b) 5,000 units and ₹54.70
(c) 4,000 units and ₹78.50
(d) 4,000 units and ₹68.38

1	2	3	4	5
D	B	B	A	C

Question – 20 **[Standard Costing] [RTP – Sep24]**

ABC Pvt Ltd is engaged in the manufacture of a Product Q. The product has the following standard production requirements determined by the technical team of the company post satisfactory completion of test run.

Raw Material Z – 2 units @ ₹2 per unit
Skilled labour of – 2.5 hours@ ₹5 per hour
Fixed Overheads – ₹7.5 per unit

The input of Raw material Z has a yield of 80% everytime when infused into production. The actual quantity of Raw material Z consumed for production during the year was 24,000 units. The Usage variance of Material Z was 2,000 Favourable. Further the actual amount of material cost for the material consumed amounted to ₹45,000.

During the said year, the actual working hours were 30,000 for which the labour cost paid by the company amounted to ₹1,20,000. The idle time variance amounted to 10,000 Adverse.

The actual fixed overheads incurred for the year amounted to ₹1,50,000 and the expenditure variance was ₹25,000 Favourable. In the context of the above, the following needs to be determined:

Question - 1

The Actual output of Product Q produced during the year is:
(a) 10,000 units
(b) 12,500 units
(c) 25,000 units
(d) 15,000 units

Question - 2

The Material price and material cost variance are:
(a) Price variance – 3,000 Adverse, Cost Variance – 5,000 Adverse
(b) Price variance – 3,000 Favourable, Cost Variance – 5,000 Favourable
(c) Price variance – 3,000 Favourable, Cost Variance – 8,000 Adverse
(d) Price variance – 5,000 Adverse, Cost Variance – 3,000 Favourable

Question - 3

The Standard Hours, Net Actual hours and the idle time are:

(a) Standard Hours – 27,500 Net Actual Hours – 28,000 hours Idle Time – 2,000 hours
(b) Standard Hours – 22,500 Net Actual Hours – 28,500 hours Idle Time – 1,500 hours
(c) Standard Hours – 24,000 Net Actual Hours – 29,000 hours Idle Time – 1,000 hours
(d) Standard Hours – 25,000 hours Net Actual Hours –28,000 hours Idle Time – 2,000 hours

Question - 4

Labour Efficiency variance and Labour rate variance are:

(a) Labour Efficiency Variance – 30,000 Favourable Labour rate Variance – 25,000 Adverse
(b) Labour Efficiency Variance – 25,000 Favourable, Labour rate Variance – 30,000 Adverse
(c) Labour Efficiency Variance – 25,000 Adverse, Labour rate Variance – 30,000 Favourable
(d) Labour Efficiency Variance – 30,000 Adverse Labour rate Variance – 25,000 Favourable

Question - 5

Fixed Overhead volume variance is:

(a) Fixed Overhead volume variance – 1,00,000 Favourable
(b) Fixed Overhead volume variance – 50,000 Adverse
(c) Fixed Overhead volume variance – 1,00,000 Adverse
(d) Fixed Overhead volume variance – 50,000 Favourable

1	2	3	4	5
A	B	D	C	C

Question – 21	**[Marginal Costing] [RTP – Jan25]**

Popular company produces various articles for student purposes. It has been in industry since last 25 years. Company had a very humble start but gained popularity over the years due to excellent quality products which were sold at very competitive prices. Company has huge reserves and feel that it is also obligated to give back to the society from which it has grown.

Last year management decided to produce and supply special quality school bags, water bottles, & geometry boxes to NGOs, at no price, as a social responsibility. These articles were simple looking but were more durable, that would not have wore-off easily and could have been used for long-term.

This year management wants to add another dimension to this social work. It approached charitable schools and government run schools and offered them the supply of the same articles, at cost. This will help students in these schools to get these things at a very low price compared to market.

The variable costs are ₹100, ₹80, and ₹40 for school bags, water bottles, and geometry boxes, respectively. These articles are made using a single machine. 0.20 hours of machine operation is

required for manufacturing 1 unit of school bag. Similarly, machine hours required for each units of water bottle and geometry box is 0.15 hours and 0.10.

hours, respectively. Fixed overhead related to machine is ₹7,40,000 per year. Machine can operate for 8,000 hours in a year. Company has decided to sell its 80% capacity production in markets. Rest is divided amongst the 2 undergoing social works, equally. All Schools requests these items in the ratio of 2:3:5, as per their demand by the school students.

Company wants to set a price for these articles to be offered to the schools. Management has few questions they need the answers to. They assigned the task to their team. Team made rough calculations but as there were too many people on the team, each came up with different answers. As a Chartered accountant, you have been approached. Understand the case closely, find the correct answers and help management to set a price.

Answer the following:

Question - 1

What is allocated fixed cost per unit of School bags, water bottles, and geometry boxes?

(a) 18.5, 13.875, 9.75
(b) 18.5, 13.875, 9.25
(c) 18.5, 13.785, 9.25
(d) 18.5, 13.785, 9.50

Question - 2

If the prices were ₹200, ₹160, and ₹100, what would be the overall break-even point in units in relation to fixed cost allocated to these supplies?

(a) 308.33 units
(b) 500 units
(c) 508.33 units
(d) 1,000 units

Question - 3

Find out the maximum number of units of each article that can be given at the prices given in Part (ii).

(a) 61, 92, 154
(b) 200, 300, 500
(c) 101, 152, 254
(d) 100, 150, 250

Question - 4

What will be the maximum units that can be supplied to the schools of each article?

(a) 1103, 1645, 2726
(b) 1093, 1655, 2748
(c) 1185, 1777, 2962
(d) 1133, 1675, 2958

Question - 5

What should be the correct price for each item as per the management's decision?

(a) 118.50, 93.875, 49.75
(b) 118.50, 93.785, 49.25
(c) 118.50, 93.785, 49.50
(d) 118.50, 93.875, 49.25

1	2	3	4	5
B	D	B	C	D

Question – 22 **[Process Costing] [RTP – Jan25]**

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%.

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 price cost. The finished stock is valued at the price at which it si received from Process III.

Mr. Rishi wants you to figure out the following to analyse the profit generated at each prcess:

Question - 1

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

Question – 2

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

Question – 3

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

Question – 4

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

Question – 5

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

1	2	3	4	5
A	B	D	B	B

Question – 23 **[Material Cost] [MTP – Sep24]**

Tropic Pvt Ltd was engaged in the business of manufacturing Product P. The product P required 2 units of Material R. The company intends to sell 24,000 units of Product P and does not wish to retain any closing stock. However, the opening stock of Product P is 4,000 units. Raw Material R has to be procured after considering the opening stock of R amounting to 10,000 units. The technical team further confirms that the yield in the course of manufacture of Product P is 80% of the input.

The company presently procures its annual requirement of materials on a quarterly basis from its regular supplier enjoying a discount of 2.5% on the invoice price of the material of ₹20 per unit. Every time the company places orders for Material R, it incurs ₹125 for each of the order placed. The company also has taken a rented warehouse for storing material R and the annual cost of storage is ₹10 per unit. The company appointed Mr. T a Chartered Accountant to review the cost of inventory and provide measures of improvement of cost. After reviewing the material purchase and consumption pattern, Mr. T suggested that the implementation of Wilson's EOQ would be beneficial to the company. He emphasized that the change in the quantity ordered would result in reduction of inventory carrying costs.

Mr. T further reviewed the labour costing and identified that the employees were paid overtime wages to ensure timely completion of projects. Overtime wages comprised of daily wage and 100% of daily wages as overtime premium. Based on the cost record it was understood that every month had 180 hours of regular working hours which was remunerated at ₹200 per hour and Overtime of 20 hours which was remunerated at ₹400 per hour. Mr. T suggested that the above time taken may be considered as standard and a scheme of Incentive be introduced to reduce overtime cost. He further indicated that Rowan scheme of incentive be used to measure performance and the improved productivity per hour would be 125 units per hour.

In this regard, address the following queries in line with the suggestions provided by Mr. T to Tropic Pvt Ltd.

Question – 1

The annual requirement of Material R to meet the target sales of 24,000 units of Product P is:
(a) 48,000 units
(b) 60,000 units

(c) 40,000 units
(d) 50,000 units

Question – 2

The ordering quantity as per the current inventory policy and the proposed Wilson's Economic order quantity of Material R are:
(a) Order Quatity as per the current inventory policy – 10,000 units & EOQ – 1,000 units
(b) Order Quantity as per the current inventory policy – 15,000 units & EOQ – 1,225 units
(c) Order Quantity as per the current inventory policy – 12,000 units & EOQ – 1,095 units
(d) Order Quantity as per the current inventory policy – 12,500 units & EOQ – 1,118 units

Question – 3

The net savings to inventory cost on migration from the current inventory policy to the Wilson's Economic Order Quantity policy would be:
(a) Savings from EOQ as compared to current discount policy – ₹26,820
(b) Savings from EOQ as compared to current discount policy – ₹20,500
(c) Savings from EOQ as compared to current discount policy – ₹33,253
(d) Savings from EOQ as compared to current discount policy – ₹25,546

Question – 4

Incentive payable under the Rowan Incentive scheme amounts to:
(a) ₹7,500
(b) ₹6,400
(c) ₹6,000
(d) ₹8,000

Question – 5

The savings in labour cost achieved by implementation of incentive scheme over the overtime payments amounts to:
(a) ₹9,600
(b) ₹5,600
(c) ₹8,000
(d) ₹3,200

1	2	3	4	5
C	A	B	B	B

Question – 24	[Marginal Costing] [MTP – Sep24]

XYZ Manufacturing Pvt. Ltd. is a prominent company in the electric appliances industry, known for producing a diverse range of high-quality products. The company has built a reputation for reliability

and innovation in the manufacturing of household appliances, including fans, mixers, and heaters. XYZ Manufacturing Pvt. Ltd. is dedicated to delivering products that meet the needs of its customers while adhering to the highest standards of quality and performance.

The company operates a state-of-the-art factory that is fully equipped with advanced machinery and technology to ensure efficient and consistent production. The factory operates 25 days a month, running multiple shifts to meet the growing demand for its products. The company have spare capacity to additional orders. Each product type—fans, mixers, and heaters—undergoes a meticulous manufacturing process that includes assembly, quality testing, and packaging.

Cost Category	Amount
Fixed cost (per month)	
Factory rent	₹3,00,000
Depreciation	₹2,00,000
Administrative Expenses	₹1,00,000
Salaries	₹4,00,000
Total Fixed costs	₹10,00,000
Number of units produced per month	10,000 units
(Note: Last month there was an additional special order of 2,000 units which resulted in higher production)	
Selling price per unit	₹1,500

Additional Info: Raw Materials include Copper, Plastic, and Other Materials. The per unit cost of Copper is ₹80 more than the cost of Plastic, while the cost of Other Materials is twice that of Plastic. And the total Raw Material Cost per unit is ₹210 more than the combined cost of Copper & Plastic.

The Labour Hour Rate is ₹100 per hour. The total labour hours used in the last month were 36,000 Hours. The Utilities Cost per unit is ₹100, and the Packaging Cost per unit is ₹50. Being a finance manager of the company, you are required to answer the following:

Question – 1

Calculate the contribution margin per unit.

(a) ₹550
(b) ₹600
(c) ₹650
(d) ₹700

Question – 2

Determine the break-even point in sales revenue.

(a) ₹31,28,593
(b) ₹25,85,153
(c) ₹27,27,025

(d) ₹27,05,983

Question – 3

If the company wants to achieve a target profit of ₹5,00,000, what should be the sales volume (in units)?

(a) 2,000 units
(b) 2,727 units
(c) 2,750 units
(d) 3,000 units

Question – 4

What would be the impact on the break-even point if the variable cost per unit increases by 10%?

(a) 2,178 units
(b) 2,198 units
(c) 2,248 units
(d) 2,258 units

Question – 5

Calculate the margin of safety in percentage if the company sells 4,000 units if the variable cost per unit increases by 10%

(a) 44.85%
(b) 42.55%
(c) 45.05%
(d) 45.75%

1	2	3	4	5
A	C	B	B	C

Question – 25 **[Material Cost] [MTP – Sep24]**

Mr. Vikas, a toy importer has understood the importance of manufacturing in India. He is backed up by the new govt. policies that motivate him to manufacture in India. As per the custom department any import made for the manufacturing under "Made in India", custom duty will be refunded upto 80%. Vikas decided not to import toy from China anymore, instead import raw material from Srilanka, for the manufacturing of toys in India. Under an agreement of Govt. Of India with Srilankan Govt., any import from Srilanka will receive tax benefits.

Vikas ordered material Xendga & material Zenga from Srilanka. Details are given below:

	Srilankan Rupees (SLR)
Material Xendga (12,000 units × 125 SLR)	15,00,000
Material Zenga (8,000 units × 225 SLR)	18,00,000

Factory Cost	33,00,000
Add: Container cost	2,00,000
Add: Freight upto loading shipment on ship (paid by exporter)	50,000
F.O.B.	35,50,000

- Ocean Freight is $2,000
- Insurance is $1,500

When shipment reached India, it was unloaded at Chennai port. Vikas requested to put the goods in custom port's warehouse. Vikas due to cash crunch was not in a position to pay custom duty and therefore did not file the bill of exchange (B.O.E.). Custom authorities charged a penalty of INR 15,000.

Finally, after a month Vikas filled B.O.E. and paid custom duty of 20% on CIF value of the shipment. IGST was also applicable @ 18% on the combined value of CIF & custom duty paid.

He spent further a sum of INR 12,500 to bring the imported goods to his factory. An inspection was done on the goods and it was found that 5% of the goods were broken. This came to management as a surprise because generally such rate of defects on imports is 8%.
Additional Information:

- Exchange rates:
  1) 1 SLR = 0.25 INR
  2) 1 USD = 75 INR
- IGST credits are available
- Containers were refunded at INR 38,000.
- Indian and Srilankan brokers were paid commission by Vikas on factory cost. Indian broker charged 6% whereas Srilankan broker charged 12%.
- CIF (cost, insurance and Freight) includes F.O.B (Free on Board)., Insurance & Ocean freight.

You are required to answer the following questions:

Question – 1

What is the total cost of shipment to be recorded by Vikas?
(a) INR 13,17,000
(b) INR 13,04,500
(c) INR 13,54,500
(d) INR 13,32,500

Question – 2

What is the absorption rate of total cost per unit of Zenga?
(a) INR 90.28
(b) INR 84.44

(c) INR 93.62
(d) INR 85.77

Question – 3

What is the absorption rate of total cost per unit of Xendga?
(a) INR 52.01
(b) INR 54.24
(c) INR 58.13
(d) INR 68.65

Question – 4

Amount of refundable taxes?
(a) INR 4,13,600
(b) INR 4,57,600
(c) INR 2,20,000
(d) INR 2,37,600

Question – 5

If loss of goods was 9% instead of 5%, what will be the amount that will be charged to statement of profit & loss?
(a) INR 13,045
(b) INR 19,898.4
(c) INR 14,178.4
(d) INR 24,045

1	2	3	4	5
A	A	B	A	C

Question – 26 **[Standard Costing] [MTP – Sep24]**

Hilfy textiles Ltd. has been a major player in the textile industry, producing high-quality polyester mix cotton fabric. The production process is complex and involves multiple stages, including spinning, weaving, quality control, and packaging. The company has been facing challenges in controlling costs and maintaining profitability, mainly due to fluctuating material costs and labor inefficiencies.

To address these challenges, the company's management has decided to implement a standard costing system to better manage costs, set benchmarks, and identify variances. The goal is to gain better control over production costs, improve budgeting accuracy, and enhance decision-making. Hilfy textiles Ltd. had prepared the following estimation for the month of April:

	Quantity/Time	Rate (₹)	Amount (₹)
Cotton	8,000 m	50.00	4,00,000

Polyester	6,000 m	40.00	2,40,000
Skilled labour	1,000 hours	37.50	37,500
Unskilled labour	800 hours	22.00	17,600

Normal loss was expected to be 10% of total input materials and an idle labour time of 5% of expected labour hours was also estimated. At the end of the month the following information has been collected from the cost accounting department:

The company has produced 14,800 m finished product by using the followings:

	Quantity/Time	Rate (₹)	Amount (₹)
Cotton	9,000 m	48.00	4,32,000
Polyester	6,500 m	37.00	2,40,500
Skilled labour	1,200 hours	35.50	42,600
Unskilled labour	860 hours	23.00	19,780

On the basis of analysis of standard costing system, company's management wants to take actions like supplier negotiation, process optimisation, employee training, etc. Being the cost manager of the company, you are required to answer the following five requirements of the management:

Question – 1

Compute Material mix variance and Material Yield Variance

(a) ₹1430 (A) & 43,200 (F)

(b) ₹1430 (F) & 43,200 (F)

(c) ₹24,000 (A) & 37,500 (F)

(d) ₹19,300 (A) & 37,500 (F)

Question – 2

Compute Material Price Variance for supplier negotiation

(a) ₹18,000 (A)

(b) ₹43,200 (F)

(c) ₹37,500 (A)

(d) ₹37,500 (F)

Question – 3

Compute Material Cost Variance

(a) ₹32,500 (F)

(b) ₹24,500 (A)

(c) ₹79,270 (F)

(d) ₹79,270 (A)

Question – 4

Compute Labour Efficiency Variance and Labour Yield Variance.

(a) ₹940 (A) & 1,140 (A)

(b) ₹2,424 (A) & 1,556 (A)

(c) ₹2,424 (A) & 1,556 (A)

(d) ₹940 (A) & 1,140 (F)

Question – 5

Compute Labour Cost Variance.

(a) ₹884 (A)

(b) ₹1,556 (F)

(c) ₹884 (F)

(d) ₹1,556 (A)

1	2	3	4	5
A	D	C	B	A

Question – 27 **[Standard Costing] [MTP – Jan25]**

XYZ Manufacturing Ltd. is a mid-sized enterprise that has established a strong reputation in the field of precision engineering. The company specializes in producing high-quality engineering components that meet the stringent requirements of various industries including automotive, aerospace, medical devices, and industrial machinery. With a commitment to precision and excellence, XYZ Manufacturing Ltd. has positioned itself as a reliable supplier of critical components that demand the highest levels of accuracy and durability.

To maintain stringent control over its production costs and enhance cost efficiency, XYZ Manufacturing Ltd. operates under a standard costing system. This system plays a pivotal role in the company's financial and operational management. Standard costing involves setting predetermined costs for each production element, including materials, labor, and overheads. These predetermined costs, known as standard costs, serve as benchmarks against which actual production costs are measured.

Particulars	Budgeted Data	Actual Data
Units produced	10,000 units	9,500 units
Fixed overheads	₹20,00,000	₹19,50,000 + ₹1,00,000 (additional quality control cost for 1,000 units chosen on sample basis)
Hours worked	15,000 hours	14,250 hours
Variable Overhead Rate	₹50 per hour	₹50 per hour (first 10,000 hours)
		₹60 per hour (additional hours)

Based on the given information you are being required to answer the follwoign questions:

Question – 1

What is the Fixed Overhead Cost Variance for XYZ Manufacturing Ltd. in May 2024?

(a) ₹50,000 (A)

(b) ₹1,00,000 (A)

(c) ₹1,50,000 (A)

(d) ₹2,00,000 (A)

Question – 2

What is the Fixed Overhead Volume Variance for XYZ Manufacturing Ltd. in May 2024?

(a) ₹50,000 (F)

(b) ₹50,000 (A)

(c) ₹1,00,000 (F)

(d) ₹1,00,000 (A)

Question – 3

What is the Variable Overhead Efficiency Variance for XYZ Manufacturing Ltd. in May 2024?

(a) ₹37,500 (A)

(b) ₹42,500 (A)

(c) ₹0

(d) ₹25,000 (A)

Question – 4

What is the Variable Overhead Expenditure Variance for XYZ Manufacturing Ltd. in May 2024?

(a) ₹40,000 (A)

(b) ₹42,500 (A)

(c) ₹45,000 (A)

(d) ₹45,030 (A)

Question – 5

What is the Fixed Overhead Expenditure Variance for XYZ Manufacturing Ltd. in May 2024?

(a) ₹50,000 (F)

(b) ₹50,000 (A)

(c) ₹1,00,000 (F)

(d) ₹1,00,000 (A)

1	2	3	4	5
C	D	C	B	B

Question – 28 **[Marginal Costing] [MTP – Jan25]**

A garment manufacturer has been producing and selling T-shirts exclusively for Indian market. His T-shirts are made of a specific material which is eco-friendly. It means that T-shirts are bio-degradable in soil after it becomes unsuitable for use.

This invention has been applauded throughout the country. Owner, Vikas, registered for the patent rights for his invention so that no one else could use it. Vikas feels that this invention will also be liked in foreign markets, and thus plans to expand his business outside India. He feels that US market is the first foreign market he should tap into.

Current cost structure (each T-shirt):

Direct material	90
Direct labour	60
Special service	80
(Used in T-shirt making, 50% fixed)	
Fixed overhead	50
Administration overhead (fixed)	20
Total cost per T-shirt	300
(+) Profit margin	200
Selling price in India	500

There is no limitation of any resources in India. Vikas is able to sell 80,000 T-shirts each year. He is currently working at 80% of his total capacity.

After searching for potential customers in US, Vikas received an inquiry for 30,000 units from a wholesale distributor in California. As per the inquiry, order will be placed if price per T-shirt is reasonable and the order has to be satisfied in full.

Vikas decided to send a quote and the order was placed by the foreign client, on the same day. Vikas, without a second thought accepted the order, but did not feel the need to extend the manufacturing capacity; therefore he decided forgo a few Indian clients.

This foreign order also required special packaging. It is spent at 20% of the total prime cost per T-shirt. The production was done quickly and foreign consignment was transported to custom port via services from a carriage agency. It charged ₹80,000 for 1 truck, whose capacity was 500 kg, to transport whole of the consignment. Truck was 20% vacant after loading the consignment.

Bill of lading was filed and a professional fee of ₹25,000 for filing this was paid to a Chartered accountant. Custom port also charged ₹80 per kg per day to handle the material, storing it in warehouse, and for loading the goods on ship.

The shipping company, which was booked by Vikas for taking the consignment to US, got delayed due to bad weather. Stock was held at port for 5 days and on 6th day it was loaded on ship. Shipping company charged ₹2,800/ 10kg of goods. Insurance was charged flat at ₹1,11,000. There is no custom duty on such exports. Answer the following questions:

Question – 1

Vikas had sufficient funds in his hands but he still raised a short-term working capital loan @ 6.5% p.a. for the satisfaction of this foreign order because he found a one time investment opportunity which was giving him 9.25% returns. Foreign order was accepted on 1st June and loan was taken on the same day. Repayment of the loan will be made on 1st September. Calculate net cash outflow due to this export order. Which of the following is correct?

(a) ₹73,91,000
(b) ₹75,47,750
(c) ₹74,76,500
(d) ₹71,06,000

Question – 2

What would have been the minimum price that Vikas could have quoted per T-shirt in US dollars? (exchange rate on 1st June, $1 = ₹83.86)

(a) $ 4.23
(b) $ 4.20
(c) $ 4.17
(d) $4.05

Question – 3

Payment from foreign client was received on 8th October when exchange rate was ₹86 for each US $. Calculate the profit earned from this export order if actual quoted price was $4.90 per T-shirt. Select the correct amongst following:

(a) ₹40,65,500
(b) ₹41,51,000
(c) ₹39,94,250
(d) ₹44,36,000

Question – 4

What is the net cash Inflow from this export order?

(a) ₹55,36,000
(b) ₹51,65,500
(c) ₹52,51,000
(d) ₹50,94,250

Question – 5

What is the Incremental benefit from this export order?

(a) ₹19,94,250

(b) ₹21,51,000

(c) ₹20,65,500

(d) ₹24,36,000

1	2	3	4	5
B	A	C	D	A

Question – 29	**[Service Costing] [MTP – Jan25]**

A truck driver, named Raju, owns a truck which can carry 5 tonne of material at a time. Raju has no other truck and he has listed himself with various carriage services agencies, to offer his services. He gets his work from these agencies and they pay him as per the load and the distance. Raju has one condition that he must be paid for at least 75% of his total capacity. Raju charges freight at ₹10 per tonne-km.

He received a work contract, from one of these agencies, where he has to take 4 tonne from Delhi in the morning and drop it off at Chandigarh. After that he will move to Ludhiana, where he again loads 3 tonne and come back to Delhi by evening. This contract is for nearly 3 months.

Raju is excited to accept the order but it is not physically possible for Raju to complete this project alone. He decides to hire a helper cum driver who will assist him in this work contract and will also drive in turns with Raju. Thus, such a long contract will be managed comfortably. This helper will take ₹15,000 per month.

The contract will start from 15th June, 2024 and will run till 14th September, 2024. Throughout this time period there are only 2 days holidays, both falling in August (1 for Independence Day and 1 for Raksha Bandhan).

Some information about the Truck and its associated costs:

- Truck was purchased on 1st April, 2021 by taking a loan of ₹20,00,000 @10% p.a. from Punjab national bank for 5 years. Raju mortgaged jewellery of his wife to get this loan.
- Every year-end he has to pay ₹5,27,595 as instalment.
- Scrap value after 10 years is expected to be ₹500,000.
- Depreciation is charged on straight-line method.
- Services and maintenance charges each month is ₹80,000.
- Truck runs on diesel and its running average is 8kms/ litre.

- Diesel cost per litre:

June	80,30
July	80.50
August	81.25
September	80.90

Yearly interest amount of loan and yearly depreciation is charged to a work contract on the basis of days worked in a year in the contract.

Distance between these places:

(1) Delhi to Chandigarh = 250 kms
(2) Chandigarh to Ludhiana = 100 kms
(3) Ludhiana to Delhi = 150 kms

Answer the following questions:

Question – 1

What would be the amount of profit Raju would have earned if he had no minimum charges limit of 75% of total capacity on absolute Tonne-km basis? (If the vehicle runs empty then he would only charge for Diesel expenses).

A. 3,34,249
B. 4,43,249
C. 5,96,977
D. 4,34,249

Question – 2

2. If payment was made on commercial Tonne-km basis and Raju had no minimum charges limit of 75%, how much he would have lost due to no minimum requirement?

A. ₹6,37,500
B. ₹5,93,750
C. ₹4,92,438
D. ₹3,91,126

Question – 3

What should be the minimum amount charged on basis of absolute Tonne-km if Raju wants to earn ₹2,70,000?

A. ₹4.58
B. ₹6.13
C. ₹8.39
D. ₹3.21

Question – 4

Choose the correct amount of depreciation and interest that should be charged to this work contract.
A. 56,983 & 22,588
B. 36,986 & 22,578
C. 63,963 & 12,568
D. 63,953 & 12,558

Question – 5

What is the profit as per current rate charged by Raju? (Use absolute Tonne-Km).
A. 7,34,249
B. 9,44,863
C. 5,96,977
D. 4,34,249

1	2	3	4	5
C	A	B	B	B

Question – 30 **[Joint & By-Product] [MTP – Jan25]**

eSalt is the biggest producer of sodium hydroxide in India. This main product of the company has a strong reactivity with other organic compounds. It is highly versatile and is alkaline in nature. However, the basic material required for the production of this product is salt along with the electricity.

The manufacturing process involve electrolysis which produces Halogen as co-product. Modern use of Halogen is widespread. However, the common use is in disinfection like for purifying drinking water or swimming pool water. It is also an important ingredient of toothpaste. Thus, the company's management affirmed the simultaneous production of Halogen.

During the previous financial year, the company purchased the base material of ₹5,34,000. For the current year, company decided to increase the production by 2 times. Due to increased production, the total conversion cost hiked to 3 times. Last year, the conversion cost accounted to ₹8,01,000 up to the point at which two products i.e. sodium hydroxide and Halogen are separated.

The production and sales information for current year is provided as below:

	Sodium hydroxide	Halogen
Production/ Sales (in tonne)	24,030	16,020
Selling price per tonne (₹)	100	150

During the current year, the management of the company pointed the extensive use of Vinly which can be produced by further processing Halogen. Having selling price of ₹250 per tonne higher than that of the Halogen, it was decided not to sell Halogen and further process it into Vinly. The incremental processing cost took ₹8,01,000 producing 10,012.50 tonnes of Vinyl.

You are required to figure out the following for managerial decision:

Question – 1

For the current year, the amount of base material purchased and th conversion cost up to the point at which two products i.e. Sodium hydroxide and Halogen are separated would be:

A. base material ₹10,68,000 and conversion cost ₹24,03,000
B. base material ₹10,68,000 and conversion cost ₹16,02,000
C. base material ₹16,02,000 and conversion cost ₹24,03,000
D. base material ₹24,03,000 and conversion cost ₹16,02,000

Question – 2

Joint cost to be apportioned between Sodium hydroxide and Halogen as per the physical unit method would be:

A. Sodium hydroxide ₹24,03,000 and Halogen ₹10,68,000
B. Sodium hydroxide ₹10,68,000 and Halogen ₹16,02,000
C. Sodium hydroxide ₹16,02,000 and Halogen ₹24,03,000
D. Sodium hydroxide ₹24,03,000 and Halogen ₹16,02,000

Question – 3

Joint cost to be apportioned between Sodium hydroxide and Halogen as per the sales value at split-off point method would be:

A. Sodium hydroxide ₹20,02,500 and Halogen ₹20,02,500
B. Sodium hydroxide ₹16,02,000 and Halogen ₹24,03,000
C. Sodium hydroxide ₹24,03,000 and Halogen ₹16,02,000
D. Sodium hydroxide ₹10,68,000 and Halogen ₹20,02,500

Question – 4

Joint cost to be apportioned between Sodium hydroxide and Halogen as per the estimated net realisable value method would be:

A. Sodium hydroxide ₹23,44,390 and Halogen ₹16,60,610
B. Sodium hydroxide ₹17,16,429 and Halogen ₹22,88,571
C. Sodium hydroxide ₹22,88,571 and Halogen ₹17,16,429
D. Sodium hydroxide ₹16,60,610 and Halogen ₹23,44,390

Question – 5

Considering that the decision relating to further processing Halogen is not approved, suggest whether this would be in favour of the management by calculating incremental revenue/loss from further processing Halogen into Vinyl.

A. Incremental loss would be ₹16,02,000, thus the decision of not further processing Halogen is correct.
B. Incremental loss would be ₹8,01,000, thus the decision of not further processing Halogen is correct.
C. Incremental revenue would be ₹8,01,000, thus the decision relating to further processing Halogen needs to be approved.
D. Incremental revenue would be ₹16,02,000, thus the decision relating to further processing Halogen needs to be approved.

1	2	3	4	5
C	D	A	B	C

Question – 31	**[Process Costing] [Sep24]**

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:
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 60%
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:

Question – 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

Question – 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

Question – 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

Question – 4

Value of units transferred to next process

(A) ₹11,10,660

(B) ₹12,75,600

(C) ₹12,51,200

(D) ₹12,72,800

Question – 5

Value of closing WIP

(A) ₹31,096

(B) ₹31,044

(C) ₹30,940

(D) ₹28,340

1	2	3	4	5

C	B	A	D	C

Question – 32 **[Material Cost] [Sep24]**

FW Limited manufactures various types of footwear and covers a considerable market share. The footwear made by company are stylish and durable. The management calls for an urgent meeting because it has come to their notice that two of their old permanent customers have moved on to its competitors.

Marketing Manager has stated that there are circumstances when company cannot fulfill the demand of their customers due to shortage of supply and this is the main reason for move on. Production Manager has stated that production team is working efficiently but workers have to wait long enough for raw material which leads to idle time and low production.

The cost accounts department of FW Limited has furnished the following data for the component B:

Purchase Price	₹4,800 per unit
Trade Discount	2% of purchase price
Total duties (No Credit availed)	8% of purchase price
Insurance Charges	₹62,000 per year
Units purchased during the year	60,000 units
Opening Stock	5,000 units @ ₹5,150 per unit
Closing Stock	4,500 units

Usages per week		Delivery Period	
Minimum	1,050 units	Minimum	5 weeks
Maximum	1,200 units	Maximum	9 weeks
Average	1,125 units	Average	7 weeks

Lead time for emergency purchase is 2 weeks.

Additional information:

- Normal wastage during the storage is 80 units (no realizable value) and abnormal wastage is 40 units.
- Factory works for 365 days in a year.

You are required to calculate the following:

Question – 1

Calculate per unit cost of material by using Average Price Method.

(A) ₹5,100
(B) ₹5,119
(C) ₹5,094
(D) ₹5,133

Question – 2

Calculate minimum stock level.
(A) 10,800 units
(B) 7,825 units
(C) 5,250 units
(D) 2,925 units

Question – 3

What will be danger level of stock?
(A) 2,400 units
(B) 7,875 units
(C) 2,250 units
(D) 2,240 units

Question – 4

Calculate average number of days (round off) for which average inventory level to be held.
(A) 27 days
(B) 29 days
(C) 26 days
(D) 30 days

Question – 5

Calculate amount of Abnormal Loss during storage to be transferred to Costing Profit & Loss Account (based on average price)
(A) ₹2,04,000
(B) ₹2,04,760
(C) ₹2,03,760
(D) ₹2,05,320

1	2	3	4	5
A	D	C	B	A