

UNIT- I

Part – A (5 marks questions)

1. What is the difference between direct expenses and indirect expenses?
2. Define Cost Accounting. What are its objectives?
3. A company manufactures 20,000 units.

Particulars	Amount (Rs.)
Direct Materials	8,00,000
Direct Labour	4,20,000
Direct Expenses	60,000
Factory Overheads	2,80,000
Administration Overheads	1,40,000
Selling Overheads	1,00,000

Prepare a Cost Sheet and calculate Cost per Unit.

4. Prepare a Cost Sheet and ascertain the Cost of Production.

Particulars	Amount (Rs)
Direct Materials	90,000
Direct Wages	40,000
Direct Expenses	10,000
Factory Overheads	30,000
Office & Administration Overheads	20,000

5. Prepare a Cost Sheet showing:

Prime Cost
Factory Cost
Cost of Production
Cost of Sales

Particulars	Amount (Rs)
Direct Materials	75,000
Direct Wages	30,000
Direct Expenses	5,000
Factory Overheads	20,000
Administration Overheads	15,000
Selling Expenses	10,000

6. From the following particulars, calculate the Factory (Works) Cost.

Particulars	Amount (Rs)
Direct Materials	80,000
Direct Labour	40,000
Direct Expenses	5,000
Factory Overheads	25,000
Opening Work-in-Progress	12,000
Closing Work-in-Progress	10,000

7. From the following particulars, calculate:

1. Raw Materials Consumed
2. Prime Cost

Particulars	Amount (Rs)
Opening Stock of Raw Materials	30,000
Purchases	2,00,000
Carriage Inward	8,000
Closing Stock of Raw Materials	28,000
Direct Labour	90,000
Direct Expenses	12,000

Part- B (15 Marks)

1. Distinguish between Financial accounting and Cost accounting.
2. Explain the classification of costs under different bases with suitable examples.
3. Prepare a Cost Sheet from the following particulars:

Particulars	Amount (Rs)
Opening Stock of Raw Materials	30,000
Purchases	4,50,000
Carriage Inward	20,000
Closing Stock of Raw Materials	40,000
Direct Wages	2,20,000
Direct Expenses	30,000
Factory Overheads	1,60,000

Particulars	Amount (Rs)
Administration Overheads	90,000
Selling & Distribution Overheads	60,000

Calculate:

- i. Material Consumed
- ii. Prime Cost
- iii. Factory Cost
- iv. Cost of Production
- v. Cost of Sales

4. The following data relate to a manufacturing concern:

Particulars	Amount (Rs)
Opening Raw Material	40,000
Purchases	7,50,000
Closing Raw Material	60,000
Direct Wages	3,80,000
Direct Expenses	50,000
Factory Overheads	2,50,000
Administration Overheads	1,80,000
Selling & Distribution Overheads	1,20,000
Sales	22,00,000

Prepare a detailed Cost Sheet showing:

- a) Material Consumed
- b) Prime Cost
- c) Factory Cost
- d) Cost of Production
- e) Cost of Sales
- f) Profit

5. Prepare a Cost Sheet from the following particulars:

Particulars	Amount (Rs)
Opening Stock of Raw Materials	25,000
Purchases	3,80,000
Carriage Inward	15,000
Closing Stock of Raw Materials	35,000
Direct Wages	1,80,000
Direct Expenses	20,000

Particulars	Amount (Rs)
Factory Overheads	1,20,000
Administration Overheads	60,000
Selling & Distribution Overheads	45,000

Profit is 25% on Cost of Sales

6. Prepare a Cost Sheet.

Particulars	Amount (Rs)
Direct Materials Consumed	6,50,000
Direct Labour	3,20,000
Direct Expenses	50,000
Factory Overheads	2,00,000
Administration Overheads	1,10,000
Opening Finished Goods	40,000
Closing Finished Goods	60,000
Selling Expenses	80,000
Sales	16,00,000

Calculate the Profit.

7. A company manufactures 8,000 units.

Particulars	Amount (Rs)
Direct Material	5,00,000
Direct Labour	2,50,000
Direct Expenses	50,000
Factory Overheads	2,00,000
Administration Overheads	1,00,000
Selling & Distribution Overheads	80,000

- i. Prepare a Cost Sheet.
- ii. Calculate Cost per Unit.
- iii. If profit is 25% on Cost, determine the Selling Price per Unit.

UNIT – II

Part – A (5 Marks)

1. What is Material control? What are the objectives of material control?
2. Write a note on EOQ
3. Find out the economic order quantity (EOQ) from the following particulars:

Annual usage : 6,000 units

Cost of material per unit : Rs. 20

Cost of placing and Receiving one order : Rs.60. Annual carrying cost of one unit : 10% of inventory value.

4. From the following information, calculate:

1. Re-order Level
2. Minimum Level

Maximum Consumption = 400 units per week
Normal Consumption = 300 units per week
Maximum Lead Time = 6 weeks
Normal Lead Time = 4 weeks

5. Prepare the Stores Ledger Account under FIFO.

Date	Particulars	Quantity	Rate (Rs)
Nov. 1	Opening Stock	300 units	18
Nov. 4	Purchased	200 units	20
Nov. 8	Issued	250 units	—
Nov.12	Purchased	100 units	22

6. Prepare the Stores Ledger Account under the LIFO method.

Date	Particulars	Quantity	Rate (Rs)
Jan. 1	Opening Stock	300 units	20
Jan. 5	Purchased	200 units	22
Jan.10	Issued	250 units	—
Jan.15	Purchased	150 units	24
Jan.20	Issued	200 units	—

7. Find out the economic ordering quantity (EOQ) from the following particulars:

Annual usage : Rs. 1,20,000

Cost of placing and receiving one order :Rs. 60

Annual carrying cost : 10 % of inventory value.

Part- B (15 Marks)

1. Explain the merits and demerits of perpetual inventory control system.

2. What do you mean by ABC analysis? What are its advantages?

3. A manufacturing company furnishes the following information regarding Material X:

Normal consumption = 400 units per week

Maximum consumption = 500 units per week

Minimum consumption = 300 units per week

Re-order period:

Minimum = 4 weeks

Normal = 5 weeks

Maximum = 6 weeks

Re-order quantity = 2,000 units

Calculate:

1. Re-order Level
2. Minimum Level
3. Maximum Level
4. Average Stock Level
5. Danger Level (Assume emergency lead time = 2 weeks)

4. ABC Manufacturing Ltd. uses Material X in large quantities. The following information is available:

- i. Annual consumption = 24,000 units
- ii. Cost of placing one order = ₹250
- iii. Purchase price per unit = ₹40
- iv. Inventory carrying cost = 10% of the purchase price per annum
- v. Working days in a year = 300 days

1. Calculate the Economic Order Quantity (EOQ).
2. Determine the number of orders to be placed in a year.
3. Calculate the time interval between two successive orders.

5. From the particulars given below write up the stores ledger card:

Date	Particulars	Quantity (Units)	Rate (₹)
Mar. 1	Opening Stock	400	25
Mar. 5	Purchased	500	27
Mar.10	Issued	350	—
Mar.15	Purchased	300	28
Mar.20	Issued	450	—
Mar.25	Purchased	400	30
Mar.30	Issued	500	—

Adopt the FIFO method of issue and ascertain the value of the closing stock.

6. Prepare the Stores Ledger Account under the LIFO Method and determine the value of the closing stock.

Date	Particulars	Quantity (Units)	Rate (₹)
Apr. 1	Opening Stock	700	30
Apr. 4	Purchased	300	32
Apr.10	Issued	600	—
Apr.15	Purchased	500	34
Apr.18	Issued	400	—
Apr.22	Purchased	200	36
Apr.28	Issued	300	—

7. From the following information, calculate:

- (a) Maximum stock level
- (b) Minimum stock level
- (c) Reorder level
- (d) Average stock level

Minimum consumption	– 240 units per day
Maximum consumption	– 420 units per day
Normal consumption	– 300 units per day
Reorder quantity	– 3,600 units
Reorder period	– 10–15 days
Normal reorder period	– 12 days

UNIT – III

PART – A (5 Marks)

1. Write a short note on Labour Turnover. List out the causes for labour turnover.
2. Distinguish between Normal Time and Abnormal Time.
3. The extracts from the payroll of M/s Maheswari Bros. are as follows:

Number of employees at the beginning of 2005 – 150

Number of employees at the end of 2005 – 200

Number of employees resigned – 20

Number of employees discharged – 3

Number of employees replaced by recruitment after discharge – 20

Calculate the labour turnover rate for the factory under the separation method.

4. From the following data, prepare a statement showing the cost per day of 8 hours of engaging a particular type of labour:

(a) Monthly salary (Basic plus Dearness Allowance) – Rs. 400

(b) Leave salary payable to workman – 15% of Basic and Dearness Allowance

(c) Employee's contribution to Provident Fund – 8% of salary (items a and b)

(d) Employer's contribution to E.S.I. – 5% of salary (items a and b)

(e) Pro rata expenditure on amenities to labour – Rs. 25 per head per month

(f) Number of working hours in a month – 200

5. A worker is paid at 25 paise per hour for completing a work within 8 hours. If he completes the work within 6 hours, calculate his wages under Halsey Plan when the rate of premium is 50%. Also ascertain the effective hourly rate of earning by the worker.

6. Calculate the earnings of a worker under Rowan Scheme

Given:

Time allowed = 48 hours

Time taken = 40 hours

Rate per hour = Re. 1

7. Raj works in a factory where the following particulars apply:

Normal rate per hour – Rs. 1.50

Normal piece rate – 20% more than time rate

Expected output – 20 units per hour

Raj produces – 157 units in an 8-hour day

Calculate his wages for the day on:

(a) Time basis

(b) Piece basis

PART – B (15 Marks)

1. Describe the calculation of wages under different methods of wage payment. Explain the essential features of a good wage payment system.

2. Explain the essential features of a good wage payment system.

3. Rajan Ltd. follows Taylor's Differential Piece Rate System, where 80% and 120% are the differential rates for below-standard and above-standard work.

From the following information, ascertain the earnings of workers X and Y.

Standard time: 15 minutes per unit

Time worked: 8 hours

Units produced: X – 28, Y – 35

Normal piece rate per unit: ₹2

4. The standard time allowed for a job is 50 hours.

A worker completes the job in 38 hours.

The wage rate is ₹80 per hour.

The worker receives 50% of the time saved as bonus.

Calculate:

1. Time Saved
2. Bonus
3. Total Earnings

5. The following information relates to a factory for the year 2025:

- a) Number of workers at the beginning of the year = **800**
- b) Number of workers at the end of the year = **900**
- c) Number of workers separated = **60**
- d) Number of workers replaced = **50**
- e) Number of new workers employed = **150**

Calculate the Labour Turnover Rate by:

1. Separation Method
2. Replacement Method
3. Flux Method

6. The standard time allowed for a job is 40 hours.

A worker completes the job in 30 hours.

The wage rate is ₹90 per hour.

Calculate the worker's earnings under:

1. Halsey Plan (50% sharing)
2. Rowan Plan

Compare the earnings under both plans.

7. A worker works 48 hours in a week and produces 480 units.

- Time rate = ₹100 per hour
- Piece rate = ₹12 per unit

Calculate:

1. Wages under Time Rate System.
2. Wages under Piece Rate System.
3. State which method is more beneficial to the worker

UNIT – IV

PART – A (5 Marks)

1. What is Machine our rate? How it is computed.
2. Define primary distribution of overheads. List any five bases of overhead apportionment.
3. The following overhead expenses are incurred in a factory:

Particulars	Amount (Rs.)
Rent	30,000
Lighting	12,000
Power	24,000

The factory has two production departments A and B.

Basis	A	B
Floor Area (sq. ft.)	3,000	2,000
Machine HP	40	60

Allocate and apportion the overheads to Departments A and B.

4. A factory has three departments: P1, P2, and S.

The following expenses are to be distributed:

Expense	Amount (Rs.)	Basis
Rent	18,000	Floor area
Electricity	12,000	Light points
Insurance	6,000	Value of assets

The departmental data are:

Particulars	P1	P2	S
Floor area (sq. m.)	600	300	100
Light points	12	6	2
Value of assets (Rs.)	4,00,000	3,00,000	1,00,000

Prepare the Primary Distribution Statement.

5. A factory has two production departments A and B and one service department S. The following expenses are incurred:

Rent	Rs.60,000
Electricity	Rs.45,000
Canteen	Rs.15,000

Particulars	A	B	S
Floor area	2,000	1,500	500
Electricity units	4,000	3,000	2,000
Workers	40	30	10

Prepare the Primary Distribution Summary.

6. A machine has the following annual expenses:

Particulars	Amount (Rs.)
Depreciation	12,000
Repairs and Maintenance	6,000
Power	9,000
Operator's Wages	18,000

The machine works for 3,000 hours in a year.

Compute the Machine Hour Rate.

7. A machine costs ₹ 4,00,000. Its estimated working life is 10 years with a scrap value of ₹40,000. It works 2,000 hours per year.

Other annual expenses are:

Repairs – ₹20,000
Power – ₹30,000
Insurance – ₹10,000
Calculate the machine-hour rate.

PART – B (15 Marks)

1. Define overheads. Explain the classification of overheads.
2. Define overheads. Distinguish between allocation and apportionment of overheads.
3. Y. Ltd. has four departments A, B, C and D. A, B and C are production departments and D is a service department. The actual costs for a period are as follows:

Particulars	Amount (Rs.)
Rent	4,000
Repairs	2,400
Depreciation	1,350
Lighting	300
Insurance of Stock	1,500
Supervision	4,500
Power	2,700

The following data are also available in respect of the four departments:

Particulars	Dept. A	Dept. B	Dept. C	Dept. D
Area (Sq. ft.)	300	220	180	100
No. of workers	36	24	18	12
Value of Plant (Rs.)	24,000	18,000	12,000	6,000
Value of Stock (Rs.)	15,000	9,000	6,000	–

Apportion the costs to the various departments on the most equitable basis.

4. A factory has Production Departments A and B and Service Department S. The following overheads are incurred:

Overhead	Amount (₹)
Rent	90,000
Electricity	60,000
Depreciation	45,000
Canteen Expenses	30,000

The following information is available:

Particulars	A	B	S
Floor area (sq.ft.)	3,000	2,000	1,000
Electricity units	5,000	3,000	2,000
Machinery value (₹)	4,00,000	3,00,000	2,00,000
Number of workers	50	30	20

Prepare the Primary Distribution Summary of Overheads.

5. A factory has departments **A, B and C**. The following overheads are incurred:

Overhead	Amount (₹)
Rent	1,00,000
Power	80,000
Lighting	30,000
Depreciation	60,000
Canteen	30,000

Use the following bases:

Rent – Floor area
Power – Power consumption
Lighting – Light points
Depreciation – Machinery value
Canteen – Number of workers

Particulars	A	B	C
Floor area	3,000	2,000	1,000
Power units	4,000	3,000	1,000
Light points	30	20	10
Machinery value (₹)	5,00,000	3,00,000	2,00,000
Workers	50	30	20

Prepare the Primary Distribution Statement.

6. Calculate the Machine Hour Rate from the following:

- (a) Cost of machine – Rs. 19,200
- (b) Estimated scrap value – Rs. 1,200
- (c) Repair charges per month – Rs. 150
- (d) Standing charges allocated to the machine per month – Rs. 50
- (e) Effective working life of the machine – 10,000 hours
- (f) Running time per month – 166 hours
- (g) Power used by the machine – 5 units per hour at 19 paise per unit.

7. Calculate the Machine Hour Rate from the following particulars of Machine No.33

Particulars	Details
Cost of machine	Rs. 10,000
Estimated scrap value	Rs. 250
Estimated working life	15,000 hours
Working hours per year	2,000 hours
Cost of repairs per year	Rs. 1,500
Wages of operator per month	Rs. 150
Chemicals per month	Rs. 100
Overheads chargeable to this machine per month	Rs. 200
Power per hour	20 units at 7 paise per unit
Number of operators looking after 4 machines	2 persons

Unit – v

Part- A (5 Marks)

1. Define Marginal Costing. Explain any four features of Marginal Costing.
2. What is Contribution? Explain Profit Volume Ratio.
3. Calculate the Break-Even Point from the following particulars:

Fixed Cost ₹1,50,000
Selling Price per unit = ₹ 10
Variable Cost per unit = ₹15

4. From the following information, calculate:

- (a) Contribution
- (b) P/V Ratio
- (c) Profit

Sales = ₹1,50,000
Variable Cost = ₹90,000
Fixed Cost = ₹35,000

5. From the following details find out

- (a) Profit volume ratio
- (b) Break – even sales and
- (c) Margin of safety

Sales	Rs.1,00,000
Total cost	Rs. 80,000
Fixed cost	Rs. 20,000
Net profit	Rs. 20,000

6. From the following find profit

Fixed cost Rs.5,00,000
Variable cost per unit Rs.10
Selling price per unit Rs.15

Output level 1,50,000 units.

7. Sales Rs. 1,00,000: Profit Rs.10,000: variable cost Rs70% find out (a) Profit volume ratio
(b) fixed cost

PART – B (15 Marks)

1. What is Break even analysis? Discuss its assumptions and uses.
2. Explain the advantages and Disadvantages of marginal costing.
3. A company sells a product at ₹100 per unit. The variable cost is ₹60 per unit and fixed cost is ₹40,000. During the year, the company sold 2,500 units.

Calculate:

1. Contribution per unit
2. Total Contribution
3. P/V Ratio
4. Profit
5. Break-Even Point in units

4. From the following information, calculate the Break-Even Point:

Selling Price per unit – ₹80
Variable Cost per unit – ₹50
Fixed Cost – ₹60,000

Also calculate:

1. Contribution per unit
2. P/V Ratio
3. Break-Even Sales
4. Profit when sales are 3,000 units

5. A company manufactures and sells a product at ₹100 per unit. The variable cost is ₹60 per unit and fixed cost is ₹80,000.

Calculate:

1. Contribution per unit
2. P/V Ratio
3. Break-Even Point in units
4. Number of units to be sold to earn a profit of ₹40,000
5. Sales required to earn the desired profit

6. The following information is given:

- Selling Price per unit = ₹120
- Variable Cost per unit = ₹72
- Fixed Cost = ₹96,000
- Desired Profit = ₹48,000

Calculate:

1. Contribution per unit
2. P/V Ratio
3. Break-Even Point in units
4. Units required to earn the desired profit
5. Sales required to earn the desired profit

7. A company has a fixed cost of ₹ 4,00,000 and a P/V ratio of 40%. Actual sales are ₹15,00,000.

Calculate:

- (a) Break-Even Sales
- (b) Margin of Safety
- (c) Profit
- (d) Sales required to earn a profit of ₹3,00,000.