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S.K.S.S ARTS COLLEGE, THIRUPPANANDAL - 612504



QUESTION BANK

Title of the Paper

COST ACCOUNTING

Course: II B.Com., & II B.Com., (CA)

Sub. Code: 16CCCM7 & 16CCCA7

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Prepared by



Dr. M. VANAJA

Assistant Professor

Department of Commerce

COST ACCOUNTING

UNIT – I

Definition, Scope and nature of cost accounting – cost concepts – classification – objectives and advantages – demerits of cost accounting – methods and techniques – cost unit – cost centres – cost sheet.

UNIT – II

Materials cost – purchase procedure – stores procedure – receipt and issue of materials storage organization and layout – Inventory control – levels of stock, perpetual inventory. ABC Analysis, EOQ – Stores ledger – pricing of material issues, FIFO, LIFO, Simple Average & Weighted Average.

UNIT – III

Labour cost – Time recording and time booking – methods of remuneration and incentive schemes – overtime and idle time – labour turnover - types – causes and remedies.

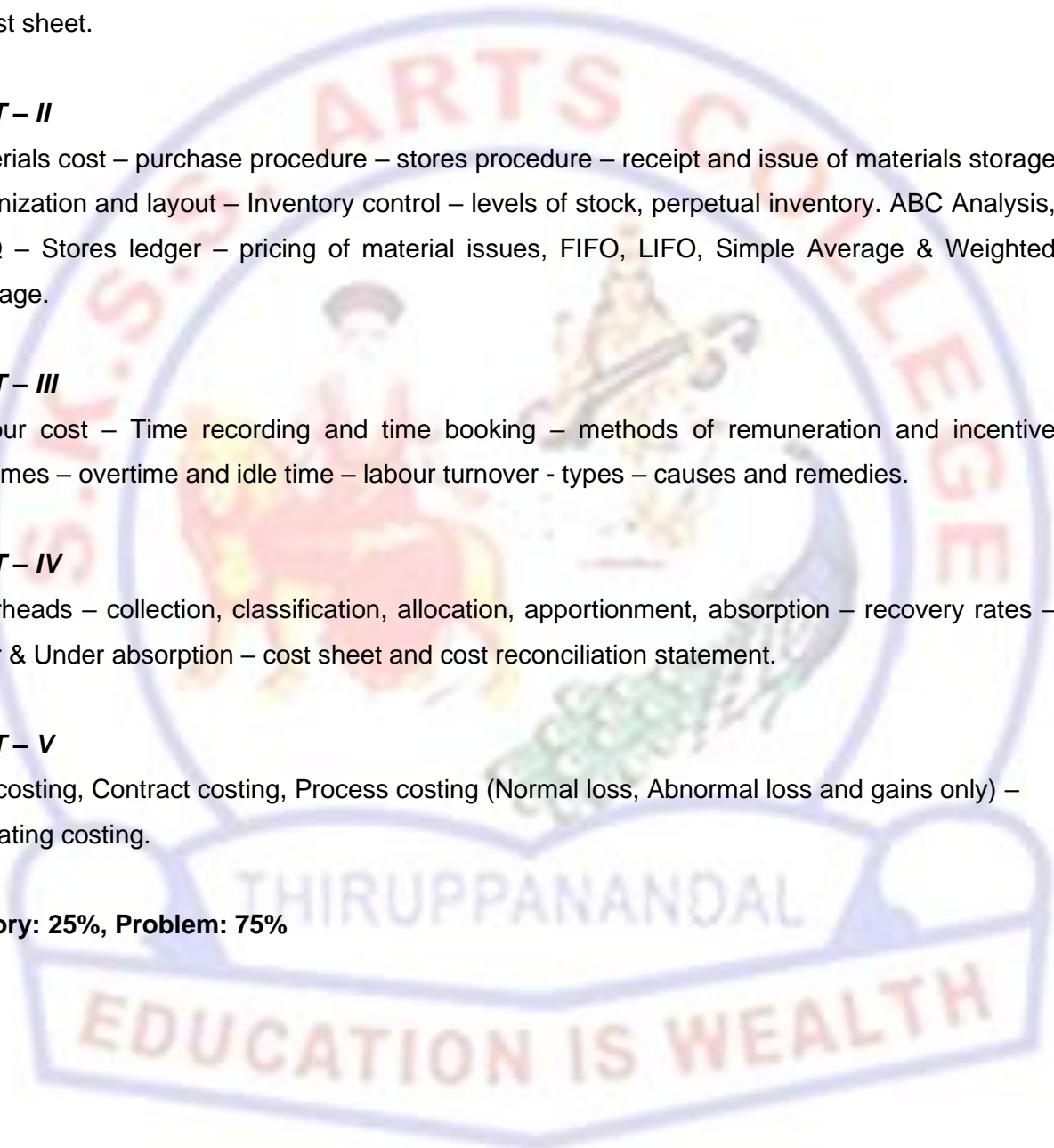
UNIT – IV

Overheads – collection, classification, allocation, apportionment, absorption – recovery rates – Over & Under absorption – cost sheet and cost reconciliation statement.

UNIT – V

Job costing, Contract costing, Process costing (Normal loss, Abnormal loss and gains only) – operating costing.

Theory: 25%, Problem: 75%



UNIT – I

CHOOSE THE CORRECT ANSWER

1. Basic objective of cost accounting is
 - a) Tax compliance
 - b) Financial audit
 - c) Cost ascertainment
 - d) None of these
2. Conversion cost excludes
 - a) Labour cost
 - b) Factory overhead
 - c) Direct expenses
 - d) Direct material cost
3. Imputed cost is a
 - a) Notional cost
 - b) Real cost
 - c) Abnormal cost
 - d) Variable cost
4. Sunk cost is a cost related to
 - a) The present
 - b) Future
 - c) Past
 - d) Tax
5. Cost classification can be done in
 - a) Two ways
 - b) Three ways
 - c) Four ways
 - d) Several ways
6. Goodwill written off is a part of
 - a) Prime cost
 - b) Factory overhead
 - c) Office overhead
 - d) None of these
7. Tender is an
 - a) Estimation of cost only
 - b) Estimation of profit only
 - c) Estimation of selling price
 - d) None of these

8. Cost of sales plus profit is
- a) Selling price
 - b) Value of finished goods
 - c) Value of goods produced
 - d) Value of stocks
9. Overhead cost is the total of
- a) All indirect costs
 - b) All direct costs
 - c) Direct and indirect costs
 - d) Specific costs
10. Cost incurred is identified with
- a) Each executive
 - b) Each unit of output
 - c) Each month
 - d) None of these

Answers: 1) (c) 2. (d) 3. (a) 4. (c) 5. (d) 6. (d) 7. (c) 8. (a) 9. (a) 10. (b)

SHORT QUESTIONS (2 MARKS)

11. Define – “Cost accounting”.
12. What is cost sheet?
13. Define cost.
14. What is cost centre?
15. What is cost audit?
16. What are the various methods of costing?
17. What is sunk cost?
18. Define the term “Cost units”.
19. Explain the meaning of “Prime cost”.
20. Find out selling price:
- Prime cost per unit Rs.720
 - Works overhead: 20% on works cost
 - Office overhead: 10% on cost of production
 - Profit: 20% on sales.

PARAGRAPH QUESTIONS (5 MARKS)

21. What are the objectives of cost accounting?
22. Reveal the merits of cost accounting.
23. Bring out the elements of cost.
24. “Cost accounting is a tool of managerial planning and control”. Explain the statement.

25. The following data are available from the books for the year ended 31-12-2018;

	Rs.
Direct materials	9,00,000
Direct wages	7,50,000
Wages	6,09,000
Selling and distribution overheads	5,25,000
Administrative overheads	4,20,000
Factory overheads	4,50,000

Prepare a cost sheet indicating the prime cost, work cost, production cost, cost of sales and sales value.

26. Prepare the cost sheet from the following data:

Direct materials Rs. 5,000;
 Direct labour Rs. 3,500;
 Factory expenses Rs. 1,500;
 Administrative expenses Rs. 800;
 Selling expenses Rs. 700.

27. During the year 2013, X Ltd, produced 50,000 units of a product. The following were the expenses.

	Rs.
Stock of raw materials on 1.1.2013	- 10,000
Stock of raw materials on 31.1.2013	- 20,000
Purchases	- 1,60,000
Direct wages	- 75,000
Direct expenses	- 25,000
Factory expenses	- 37,500
Office expense	- 62,500
Selling expenses	- 25,000

You are required to prepare a cost sheet showing cost per unit and total cost at each level.

28. Ascertain the prime cost from the following:

	Rs.
Direct material used	- 82,000
Chargeable expenses	- 5,000
Opening stock of raw materials	- 10,000
Raw materials bought during the year	- 60,000
Closing stock of raw material	- 20,000
Carriage inward	- 1,500
Carriage outward	- 2,000
Raw materials returned to supplier	- 1,500

29. Prepare cost sheet:

Raw materials used Rs. 60,000; wages Rs. 15,000;
 Works expenses: 100% of wages;
 Office expenses: 25% of works cost;
 Selling expenses: 10% of cost of production.

30. The following information has been obtained from the records of Left-Centre Corporation for the period from January 1 to June 30, 2008: Prepare cost sheet.

	2008 On January 01	2008 On January 30
	Rs.	Rs.
Cost of raw materials	30,000	25,000
Cost of work-in-progress	12,000	15,000
Cost of stock of finished goods	60,000	55,000
<i>Transaction during six months are:</i>		
Purchase of raw materials	4,50,000	
Wages paid	2,30,000	
Factory overheads	92,000	
Administration overheads	30,000	
Selling and Distribution overheads	20,000	
Sales	9,00,000	

ESSAY TYPE QUESTIONS (10 MARKS)

31. Distinguish between Financial Accounting and Cost Accounting.

32. The Bangalore Ltd. supplies you the following information and requires you to prepare a cost sheet.

	Rs.
Stock of raw materials on 1st Sept., 2013	75,000
Stock of raw materials on 30th Sept., 2013	91,500
Direct wages	52,500
Indirect wages	2,750
Sales	2,00,000
Work-in-progress on 1st Sept., 2013	28,000
Work-in-progress on 30th Sept., 2013	35,000
Purchases of raw materials	66,000
Factory rent, rates and power	15,000
Depreciation of plant and machinery	3,500
Expenses on purchases	1,500
Carriage outward	2,500
Advertising	3,500
Office rent and taxes	2,500
Traveler's wages and commission	6,500
Stock of finished goods on 1st Sept., 2013	54,000
Stock of finished goods on 30th Sept., 2013	31,000

33. The following data have been extracted from the books of M/s, ABC Industries Ltd. For the calendar year 2017:

Particulars	(Rs.)
Opening stock of raw materials	25,000
Purchase of raw materials	85,000
Closing stock of raw materials	40,000
Carriage inwards	5,000
Wages: Direct	75,000
Indirect	10,000
Other direct charges	15,000
Rent and rates: Factory	5,000
Office	500
Indirect consumption of materials	500
Depreciation: Plant	1,500
Office Furniture	400
Salary: Office	2,500
Salesman	2,000
Other factory expenses	5,700
Other Office expenses	700
Managing Director's remuneration	12,000
Other selling expenses	1,000
Travelling expenses of salesman	1,100
Carriage and freight outward	1,400
Salesman	2,50,000
Advance income-tax paid	15,000
Advertisement	2,000

Managing Director's remuneration is to be allocated in the ratio of 2:1:3 for factory, office and sales departments respectively. From the above information, prepare the different phases of cost and net profit.

34. Mr. Gopal furnishes the following data relating to the manufacture of a standard product during the month of April 2013 :

Raw materials consumed	Rs. 5,000
Direct labour charges	Rs. 9,000
Machine hours worked	900
Machine hour rate	Rs. 5
Administration overheads	20% on works cost
Selling overhead	Re. 0.50 per unit
Units produced	17,100
Units sold	16,000 at Rs. 4 per unit

You are required to prepare a cost sheet from the above, showing profit for the period.

35. From the following information prepare a cost sheet to show:

- (a) Prime cost;
- (b) Works cost;
- (c) Cost of production;
- (d) Cost of sales; and
- (e) Profit.

	Rs.
Raw materials purchased	32,250
Carriage on purchases	850
Direct wages	18,450
Factory overhead	2,750
Selling overhead	2,450
Office overhead	1,850
Sales	75,000
Sale of factory scrap	250
Opening stock of finished goods	9,750
Closing stock of finished goods	11,100

36. From the following particulars, prepare a cost statement :

	Rs.
Stock, 1-1-2013: Raw materials	30,500
Finished goods	20,400
Stock, 31-1-2013: Raw materials	48,500
Finished goods	10,000
Purchase of raw materials	25,000
Work-in-progress, 1-1-2013	8,000
Work-in-progress, 31-1-2013	9,000
Sales	95,000
Direct wages	20,400
Factory expenses	10,500
Office expenses	5,400
Selling expenses	3,800
Distribution expenses	2,500

Also calculate the percentage of works expenses to direct wages and the percentage of office expenses to works cost.

37. The costing department of a company has supplied the following data for the supply of 2,000 units of a product.

Direct materials:	40,000 tonnes	at Rs. 5 per tonne.
Direct wages:	8,000 labour hours	at Rs. 50 per hour.
Variable overheads:	Factory Rs. 10 per hour.	
	Selling Rs. 20 per unit.	
Fixed overheads:	Factory Rs. 1,00,000	
	Office Rs. 2,00,000	

Prepare a cost sheet showing price to be fixed which will fetch a profit of 25% on cost.

38. The following extracts of costing information relate to commodity X for the year ending 31-12-2013.

	Rs.
Purchases of raw materials	6,000
Direct wages	5,000
Rent, rates and insurance	2,000
Carriage inwards	100
Stock (1-1-2013) : Raw materials	1,000
Finished products - 200 tonnes	800
Stock (31-12-2013) : Raw materials	1,100
Finished products - 400 tonnes	-
Cost of factory supervision	400
Sale of finished products	15,000

Advertising and selling cost is 40 paise per tonne sold. 3,000 tonnes of the commodity were sold during the year. Prepare a Cost Sheet.

39. The following particulars have been extracted from the books of Calcutta Manufacturing Co. Ltd., Calcutta, for the year ended 31 March 2013

	Rs.
Stock of materials as on 1 April, 2012	47,000
Stock of materials as on 31 March, 2013	50,000
Materials purchased	2,08,000
Drawing office salaries	9,600
Counting house salaries	14,000
Carriage inwards	8,200
Carriage outwards	5,100
Cash discounts allowed	3,400
Bad debts written off	4,700
Repairs of plant, machinery and tools	10,600
Rent, rates, taxes and insurance (factory)	3,000
Rent, rates, taxes and insurance (office)	1,000
Travelling expenses	3,100
Travelling salaries and commission	8,400
Production wages	1,40,000
Depreciation on plant and tools	7,100
Depreciation written off on furniture	600
Director's fee	6,000
Gas and water charges (factory)	1,500
Gas and water charges (office)	300
General charges	5,000
Manager's salary	12,000

Out of 48 working hours in a week, the time devoted by the manager to the factory and office was on an average 40 hours and 8 hours respectively throughout the accounting year. You are required to prepare a Cost Sheet.

40. From the books of M/S ZYX Enterprises, the following details have been extracted for the year ending March 31, 2013 :

	Rs.
Stock or materials - Opening	1,88,000
Closing	2,00,000
Materials purchased during the year	8,32,000
Direct wages paid	2,38,400
Indirect wages	16,000
Salaries to administrative staff	40,000
Freight - Inward	32,000
Outward	20,000
Sales	15,79,800
Cash discount allowed	14,000
Bad debts written off	18,800
Repairs of plant and machinery	42,400
Rent, rates and taxes - Factory	12,000
Office	6,400
Travelling expenses	12,400
Salesmen's salaries and commissions	33,600
Depreciation written off- Plant & Machinery	28,900
Furniture	2,400
Director's fees	24,000
Electricity charges (factory)	48,000
Fuel (for boiler)	64,000
Sale of scrap	500
General charges	24,800
Manager's salary	48,000

The manager's time is shared between the factory and the office in the ratio of 20 : 80.

From the above details you are required to prepare a cost sheet to show:

- (a) Prime Cost;
- (b) Factory Cost;
- (c) Cost of Production ;
- (d) Total Cost;
- (e) Profit.

UNIT – II

CHOOSE THE CORRECT ANSWER

1. Direct material is a
 - a) Selling and distribution cost
 - b) Administrative cost
 - c) Manufacturing cost
 - d) Any of the above

2. Which of the following is an accounting record?
 - a) Store ledger
 - b) Bin card
 - c) Bill of materials
 - d) All of these

3. A purchase requisition is prepared by
 - a) Store keeper
 - b) Supplier
 - c) Foreman
 - d) Purchase manager

4. Material control involves
 - a) Consumption of material
 - b) Issue of material
 - c) Purchase of materials
 - d) Purchase, storage, and issue of materials.

5. Material requisition is meant for
 - a) Purchase of material
 - b) Supply of material from stores
 - c) Sale of material
 - d) None of the above

6. ABC analysis is
 - a) Always better control
 - b) Advantages of better control
 - c) At best control
 - d) None of the above

7. FIFO is
 - a) Fast Investment in Future orders
 - b) First in First out
 - c) Fast issue of First orders
 - d) None of these

8. LIFO method of pricing of material issues is more suitable when
- Material prices are rising
 - Material pricing are falling
 - Material pricing are fluctuating
 - Material pricing are unchanging
9. Average price methods are more suitable when
- Material prices are rising
 - Material pricing are falling
 - Material pricing are fluctuating
 - Material pricing are constant
10. Scrap is
- Residue of raw material
 - Wastage of material
 - Surplus material
 - Abnormal loss of material

Answers: 1) (c) 2. (a) 3. (a) 4. (d) 5. (b) 6. (a) 7. (b) 8. (a) 9. (c) 10. (a)

SHORT QUESTIONS (2 MARKS)

- What do you mean by EOQ?
- Write a short note on ABC analysis?
- State the objectives of inventory control.
- How do you price material issues under LIFO method?
- What is Bin Card?
- What is inventory control?
- What is material control?
- State the various stock levels.
- What is perpetual inventory?
- Calculate Economic Order Quantity from the following:

Consumption during the year	600 units
Ordering cost	Rs. 12
Carrying cost	20%
Price per unit	Rs. 20

PARAGRAPH QUESTIONS (5 MARKS)

- List out various stock levels maintained by stores department.
- Briefly explain the types of stores control.
- Explain "ABC" method of inventory control.

24. A factory consumes 60 units of material per day which is supplied by a vendor in lots of 240 units each at Rs. 2,400 per lot. The factory works for 300 days per annum. Each order involves handling charges of Rs. 120 and freight charges of Rs.380. The storage cost is Re.0.50 per unit per annum. The interest cost to carry inventory works out at 1.25% per month. Calculate EOQ.

25. Find out the economic order quantity.

Annual usage Rs.1,20,000

Cost of placing and receiving one order Rs.60

Annual carrying cost = 10% of inventory value.

26. From the following information, calculate (i) Maximum stock level (ii) Minimum stock level (iii) Re-order level

Minimum consumption	240 units per day
Normal Consumption	300 units per day
Maximum consumption	420 units per day
Re-order quantity	3,600 units per day
Re-order period	10 – 15 days
Normal order period	12 days.

27. Prepare store ledger account, pricing the issues at "Simple Average Rate".

Year	Qty	Receipts Rate	Issues Qty
15.03.2013	200	Rs. 2.00	
18.03.2013	300	Rs. 2.40	
25.03.2013			250
28.03.2013	250	Rs. 2.60	
30.03.2013			200

28. Find out ordering level from the following information:

- (a) Minimum stock 1,000 units;
- (b) Maximum stock 2,000 units;
- (c) Time required for receiving the material 15 days;
- (d) Daily consumption of material 50 units.

29. A manufacturer buys certain equipments from outside suppliers at Rs.30 per unit. Total annual needs are 800 units. The following further data are available.

Annual return on investment	10%
Rent, insurance, taxes per unit per year	Re.1
Cost of placing an order	Rs. 100

Determine the economic order quantity.

30. Prepare store ledger account, pricing the issues at “Weighted Average Rate”.

		Receipts	Issues
Year	Qty	Rate	Qty
15.03.2013	200	Rs. 2.00	
18.03.2013	300	Rs. 2.40	
25.03.2013			250
28.03.2013	250	Rs. 2.60	
30.03.2013			200

ESSAY TYPE QUESTIONS (10 MARKS)

31. The following is the record of receipts and issues of a certain material in a factory during a month.

March 2015

- 1 Opening stock 5000 units @ Rs.10 per unit
- 5 Issued 3000 units
- 7 Received 6000 units @ Rs.10.2 per unit
- 15 Issue 2500 units (stock verification reveals loss of 100units)
- 16 Received back from orders 1000 units (previously issued at Rs.9.15 per unit)
- 17 Issued 4000 units
- 25 Received 2200 units @ Rs.10.30 per unit
- 27 Issued 3800 units

At what price will you issue the materials according to FIFO and LIFO methods using perpetual inventory system?

32. The stock of material in hand on 1st April, 2013 was 400 units at Rs.50 per unit. The following receipts and issues were recorded. Prepare a Stores Ledger Account by adopting LIFO Methods.

- Date** 2 April Purchased 100 units @ Rs. 55 each
- 6 April Issued 400 units
- 10 April Purchased 600 units @ Rs.60 each
- 13 April Issued 500 units
- 20 April Purchased 500 units @Rs.65 each
- 25 April Issued 600 units
- 10 May Purchased 800 units @ Rs.70 each
- 12 May Issued 500 units
- 13 May Issued 200 units
- 15 May Purchased 500 units @ Rs.75 each
- 12 June Issued 400 units
- 15 June Purchased 300 units @ Rs.80 each.

33. The following is an extract of the record of receipt and issues of Sulphur in a chemical factory during **February**:

1	Opening balance	500 tons @ Rs.200
3	Issued	70 tons
4	Issued	100 tons
8	Issued	80 tons
13	Received from supplier	200 tons @ Rs.190
14	Returned from Dept.	15 tons
16	Issued	180 tons
20	Received from supplier	240 tons @ Rs.190
24	Issued	300 tons
25	Received from supplier	320 tons @ Rs.190
26	Issued	115 tons
27	Returned from Dept.	35 tons
28	Received from supplier	100 tons @ Rs.190

Issues are to be priced on the principle of 'First-in First-out'. The stock verifiers of the factory had found a shortage of 10 tons on the 22nd and left a note accordingly. Draw up a priced stores ledger card for the material showing the above transactions.

34. A company manufactures 5,000 units of a product per month. The cost of placing an order is Rs.100. The purchase price of the raw material is Rs.10 per kg. The re-order period is 4 to 8 weeks. The consumption of raw materials varies from 100 kg. to 450 kg. per week. The average weekly consumption being 275 kg. The carrying cost of inventory is 20% per annum.

Assuming 52 weeks in a year, you are required to calculate: (i) Re-order quantity; (ii) Maximum level; (iii) Minimum level; and (iv) Average level.

35. From the particulars given below prepare the stores ledger account.

2013 Jan 1	Opening stock	1000 units at Rs 26 each
5	Purchase	500 units at Rs 24.50 each
7	Issued	750 units
10	Purchased	1500 units at Rs 24 each
12	Issued	1100 units
15	Purchased	1000 units at Rs 25 each
17	Issued	500 units
25	Purchased	300 units
29	Issued	1500 units

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

36. Two Components X and Y are used as follows:

- Normal Usage - 600 Units per week each.
- Maximum usage - 900 Units per week each.
- Minimum Usage - 300 Units per week each.
- Reorder Quantity - X 4800 units, Y 7200 units.
- Reorder period: - X= 4 to 6 Weeks
Y= 2 to 4 weeks.

Calculate for each Component a) Reorder Level b) Minimum Level c) Maximum Level d) Average Stock Level.

37. Following information is given:

Cost of placing a purchase order	Rs. 20
No. of units to be purchased during the year	5,000 Nos.
Purchase price per unit inclusive of transport cost	Rs. 50
Annual Storage cost per unit	Rs. 5
Details of lead time:	
- Average	10 days
- Maximum	15 days
- Minimum	6 days
- For emergency purchase	4 days
Rate of Consumption per day:	
- Average	15 days
- Average	20 days

Calculate: (i) Re-ordering level
(ii) Re-order quantity
(iii) Maximum level
(iv) Minimum level
(v) Danger level.

38. A public company has 400 units at Rs. 5 per unit as on 30-9-2013. The following were the purchases made during October 2013.

Oct. 1	600 units at Rs. 6 per unit.
Oct. 5	1,200 units at Rs. 7 per unit.
Oct. 10	1,600 units at Rs. 8 per unit.
Oct. 20	800 units at Rs. 5 per unit.

The physical stock on 31-10-2013 was 2,600 units. What would be the value of closing stock on 31-10-2013 if the materials were issued according to.

a) FIFO method. b) LIFO method c) Average method.

39. XY Ltd. Purchase and issued the materials in the following order:

2013 Mar. 1	Purchased 300 units at Rs. 3 per unit
5	Purchased 500 units at Rs. 4 per unit
10	Issued 500 units
12	purchased 700 units at Rs. 4.50 per unit
15	Issued 700 units
20	Purchased 300 units at Rs. 5 per unit
30	issued 150 units

Ascertain the quantity of closing stock as on 31st March and state its value under "Weighted Average Cost" method.

40. Prepare store ledger account under LIFO method:

Purchases:

3.8.2017	750kg	@Rs.2.00
18.8.2017	350kg	@Rs.2.10
25.8.2017	600kg	@Rs.2.20
28.8.2017	500kg	@Rs.2.30

Issues:

19.8.2017	850kg
26.8.2017	450kg
29.8.2017	570kg
30.8.2017	150kg

UNIT – III

CHOOSE THE CORRECT ANSWER

1. Labour turnover is
 - a) Productivity of labour
 - b) Efficiency of labour
 - c) Change in labour force
 - d) None of these
2. Time study is for
 - a) Measurement of work
 - b) Fixation of standard time
 - c) Ascertainment of actual hours
 - d) None of these
3. Idle time is
 - a) Time spent by workers in factory
 - b) Time spent by workers off their work
 - c) Time spent by workers on their jobs
 - d) None of these
4. Over time is
 - a) Actual hours being more than normal hours
 - b) Actual hours being more than standard hours
 - c) Standard hours being more than actual hours
 - d) None of these
5. Time keeping refers to
 - a) Time spent by the workers on their jobs
 - b) Time spent by workers in the factory
 - c) Time spent by workers without work
 - d) None of these

6. Job evaluation is
- Process of studying and assessing relative values of jobs
 - Studying methods of performing jobs
 - Determining the best way to perform jobs
 - None of these
7. Time wages are paid on the basis of
- Standard time
 - Time saved
 - Output produced
 - Actual time
8. Piece workers are paid on the basis of
- Output sold
 - Output produced
 - Output in stock
 - None of these
9. Differential piece wages means
- Different wages for different levels of performance
 - Wages for different times consumed
 - Wages for time saved
 - None of these
10. Halsey premium scheme is
- Individual incentive scheme
 - Group incentive scheme
 - Time and piece wage system
 - Differential piece wage system

Answers: 1. (c) 2. (b) 3. (b) 4. (a) 5. (b) 6. (a) 7. (d) 8. (b) 9. (a) 10. (a)

SHORT QUESTIONS (2 MARKS)

- What is labour cost?
- What is meant by Idle Time?
- What is the logic behind piece rate system?
- What do you mean by labour turnover?
- Define Job Card.
- How to calculate Halsey Plan?
- Write out any two differences between Time rate system and Piece rate system.
- What are the kinds of labour cost?
- What is overtime?

20. Calculate the total earnings from the following data under Halsey plan and Halsey-weir plan:
- Standard time: 10 Hours
 Time taken: 8 hours
 Time rate: Rs..2.50 per hour

PARAGRAPH QUESTIONS (5 MARKS)

21. What is labour turnover? How is it measured?
22. Explain the causes for labour turnover.
23. Calculate the earnings of Worker A and B under Taylor's Differential Piece-rate System from the following particulars:
- Normal rate per hour Rs. 1.80
 Standard time per unit 20 seconds
Differentials to be applied:
 80% of piece rate below standard
 120% of Piece rate at or above standard
 Worker A produces 1,300 units per day and Worker B produces 1,500 units per day of 8 hours.
24. The following particulars apply to a particular job:
- Standard production per hour 6 units.
 Normal rate per hour Rs. 1.20
 In an 8 hour day
 X produces 32 units; Y produces 42 units; Z produces 50 units
 Calculate the wages of these workers under Merrick Multiple Piece Rate System.
25. The firm employs 5 workers at an hourly rate of Rs. 2.00. During the week, they worked for 4 days for a total period of 40 hours each and completed a job for which the standard time was 48 hours for each worker. Calculate the labour cost under Halsey method and Rowan method.
26. Calculate normal, overtime and total wages payable to a worker from the particulars given below:

Days	Hours Worked
Monday	10
Tuesday	9
Wednesday	8
Thursday	12
Friday	9
Saturday	4
Normal working hours	8 per day
Normal rate	Rs. 5 per day
Overtime -	Upto 9 hours per day – single rate and Beyond 9 hours a day – double rate.

27. Calculate the earnings of worker from the following information under a) Halsey and b) Rowan plans.

Standard time = 10 hours taken
Time taken = 8 hours
Wages rate per hour = Rs.6

28. From the following particulars, you are required to prepare a statement of labour cost showing the cost per day of 8 hours.

- a) Monthly salary – Rs. 200
- b) Leave Salary – 5% of salary
- c) Employer's contribution of provident fund 8% of (a) and (b)
- d) Employee's contribution to state insurance 2.5 of (a) and (b)
- e) Pro-rata expenditure on amenities to labour Rs.17.95 per head, per month.
- f) No. Of working hours in a month 200.

29. From the particulars given below prepare labour cost per man day of 8 hours:

- 1) Basic Salary Rs. 4 per day.
- 2) Dearness allowance – 25 paise per every point over 100 cost of living index for working class. Current cost of living index is 700 units.
- 3) Leave Salary – 10% of (i) and (ii)
- 4) Employer Contribution to Provident fund 8% of (i), (ii) and (iii)
- 5) Employer's Contribution to State Insurance – 2.5% of (i), (ii) and (iii)
- 6) Expenditure on amenities to labour – Rs.20 per head per month.
- 7) Number of working days in a month – 25 days of 8 hours each.

30. From the information given below, calculate the earnings of three workers X,Y and Z under Gantt's task bonus plan:

Time rate Rs. 15 per hour
High task per day of 8 hours = 80 units
High piece rate Rs. 2 per unit
Daily output = X : 70 units; Y : 80 units; Z : 90 units

ESSAY TYPE QUESTIONS (10 MARKS)

31. Calculate the earnings of 3 workers A,B and C under Merrick's multiple piece rate system from the given information:

Standard production per day – 150 units
Normal piece rate – Rs.0.50 per unit
A's production (per day) – 120 units
B's production (per day) – 140 units
C's production (per day) – 160 units

32. From the following particulars determine the earnings for the week of a worker under:

- a) Straight Piece Rate
- b) Differential Piece Rate
- c) Halsey Premium Plan
- d) Rowan Plan

Number of working hours per week	48 hours
Wages per hour	Rs. 3.75
Rate per piece	Rs. 1.50
Normal time per piece	20 minutes
Normal output per week	120 pieces
Actual output for the week	150 pieces

Differential piece rate:

80% of piece rate when output is below standard.

120% of piece rate when above standard.

33. From the following data; find out the labour turnover rate by adopting.

- Flux method
- Replacement method
- Separation method

Number of workers on the payroll:

At the beginning of the month 500

At the end of the month 600

During the month, 5 workers left, 20 persons were discharged and 75 workers were recruited; of these, 10 workers were recruited in the vacancies of those leaving, while the rest were engaged for an expansion scheme.

34. A worker takes 80 hours to a job for which the time allowed is 100 hours. His daily rate is Rs. 2.50 per hour. Calculate the works cost of the job under the following methods of payment of wages:

- Time rate
- piece rate
- Halsey plan and
- Rowan Plan

Additional information:

- Material cost Rs. 120
- Factory overhead 125% of wages

35. Calculate the earnings of workers X and Y under Taylor's Differential Piece Rate System, Straight Piece Rate System and Merrick's multiple piece rate system from the following particulars.

Normal rate per hour – Rs.24

Standard time per unit – 15 seconds

Differentials to be applied

80% of Piece rate below standard

120% of Piece rate at or above standard

Worker X produces 1900 units per day of 8 hours and worker Y produces 2000 units per day of 8 hours.

36. A worker takes 12 hours to complete a job on daily wages and 9 hours on a scheme of payment by results. His day rate is Rs. 4 per hour. The material cost of the product is Rs. 6 and the overheads are recovered at 150% of total direct wages. Calculate Factory cost of the product under: (a) Piece Work Plan, b) Rowan Plan, c) Halsey Plan.

37. Standard time required for a job is 30 hours.

Actual time taken for a job = 24 hours.

Rate per hour = Rs. 10 per hour.

Calculate worker earnings under Bedeaux point Premium plan:

38. In a manufacturing concern, the daily wages guaranteed for workers is Rs. 40. The standard output for the month is 1,000 units representing 100% efficiency. The hourly rate of wages is paid without bonus to those workers who show up $66\frac{2}{3}$ % efficiency. Beyond this, bonus is payable in a graded scale.

Efficiency	Bonus
90%	10%
100%	20%

Further increase of 1% of bonus for every 1% further rise in efficiency. Calculate the total earnings of A,B,C and D who worked for 26 days in a month and their output being 500, 900, 1,000 and 1,200 units, respectively.

Compute the earnings of workers under Emerson's Efficiency plan.

39. Calculate the earnings of a worker from the following information:

- (a) Time rate method
- (b) Piece rate method
- (c) Halsey plan
- (d) Rowan plan

Information given:

Standard time: 30 hours

Time taken: 20 hours

Hourly rate of wages Re.1 per hour plus dearness allowance @ 50 paise per hour worked.

40. From the following particulars, calculate earning of the worker under:

- (i) Time rate system
- (ii) Piece wage rate
- (iii) Halsey plan and
- (iv) Rowan plan

Wage rate – Rs. 2 per hour

Production per hour – 4 units

Dearness allowance – Re. 1 per hour

Standard time fixed – 80 hours

Actual time taken – 50 hours

Production – 250 units

UNIT – IV

CHOOSE THE CORRECT ANSWER

1. Overhead is also known as
 - a) On cost
 - b) Basic cost
 - c) Extra cost
 - d) Chargeable expenses
2. Factory overhead is also termed as
 - a) Sundry overhead
 - b) Extra overhead
 - c) Works overhead
 - d) None of these
3. The allocation of whole items of cost to cost centres or cost units is termed as
 - a) Cost allocation
 - b) Cost apportionment
 - c) Overhead absorption
 - d) Cost reapportionment
4. Which of the following is a service department?
 - a) Finishing department
 - b) Refining department
 - c) Receiving department
 - d) Machining department
5. Warehouse expenses is an example of
 - a) Factory overhead
 - b) Administrative overhead
 - c) Selling overhead
 - d) Distribution overhead
6. The need for reconciling cost and financial accounts arise
 - a) To comply with statutory obligations
 - b) To facilitate audit work
 - c) To ensure the reliability of cost accounts
 - d) To fix standards
7. Absorption means
 - a) Charging of overhead to cost centres or cost units
 - b) Charging of overheads to cost units
 - c) Charging of overheads to cost centres
 - d) None of the above

8. Factory overhead should be absorbed on the basis of
- Machine hours
 - Direct labour hours
 - Direct labour cost
 - Relationship to cost incurred
9. Administrative overhead are recovered as a percentage of
- Work cost
 - Prime cost
 - Direct material
 - Direct wages
10. Reconciliation is usually done between
- Gross profit and net profit
 - Previous year's profit and Current year's profit
 - Costing profit and Financial accounts profit
 - Current year profit with next year provisions

Answers: 1. (a) 2. (c) 3. (a) 4. (c) 5. (d) 6. (b) 7. (b) 8. (d) 9. (a) 10. (c)

SHORT QUESTIONS (2 MARKS)

- What is variable overheads?
- What do you mean by cost reconciliation statement?
- Give the bases for apportionment of overheads
- Mention the reason for preparing cost reconciliation statement.
- Define overhead.
- What is cost apportionment?
- What is machine hour rate?
- What is fixed overhead?
- What is meant by Allocation of overheads?
- Give any four classification of overhead.

PARAGRAPH QUESTIONS (5 MARKS)

- Explain various types of overheads.
- Distinguish between Allocation and Apportionment of overheads.
- Indicate the basis you would adopt for apportionment of the following items of overhead expenses to different departments.
 - Indirect material
 - indirect wages
 - Depreciation
 - Electricity for power purpose
 - Lighting and heating
 - Crèche expenses
 - Material handling charges
 - Recreation expenses

- (i) Welfare department expenses
- (j) Stores service
- (k) Fire insurance stock
- (l) Time keeping expenses

24. A company has three production departments and two service departments and for a period the departmental distribution summary has the following totals:

Production Departments:	Rs.
X - Rs.1000; Y - Rs.900 and Z - Rs.600 =	2500
Service Departments:	
A – Rs. 200; B - Rs.150	= 350
Total	2850

The expenses of service departments are charged out on a percentage basis as follows:

	X	Y	Z	A	B
Service Dept A	20%	40%	30%	-	10%
Service Dept B	30%	20%	30%	20%	-

Prepare a statement showing the apportionment of two service department expenses to production departments under Repeated distributed Method.

25. Calculate Machine Hour Rate for Machine A.

- Cost of machine Rs. 16,000
- Estimated scrap value Rs. 1,000
- Effective working life Rs. 10,000 hours
- Running hours for a 4 weekly period: 160 hours
- Average repairs and maintenance for 4 weekly period Rs. 120
- Standing charges allocate to machine A for a 4 weekly period Rs. 40
- Power 4 units per hour at a cost of 25 paise per hour.

26. Calculate Machine Hour Rate to cover overhead expenses indicate below:

	Per hour		Per year
	Rs.		Rs.
Electric power	0.75	Rent	270
Steam	0.30	Repair	550
Water	0.20	Running hours	2,000

Original cost of the machine is Rs. 15,000; Book value Rs. 3,500; Replacement value Rs. 11,500. Depreciation at 10% on original cost.

27. From the following information, re-apportion the service department's expenses to production departments.

	Production Dept.			Service Dept.	
	P ₁	P ₂	P ₃	S ₁	S ₂
	Rs.	Rs.	Rs.	Rs.	Rs.
Expenses as per Primary Distribution Summary	8,850	7,165	6,285	4,515	6,010

Apportion the expenses of service department S₂ in proportion of 3:3:4 and those of service department S₁ in the ratio of 3:1:1 to departments P₁, P₂ and P₃ respectively

28. Calculate Labour Hour Rate from the following.

Total number of workers	100
Working days in a year	300
No. of hours per day worked	8
Idle time	5%
Factory overheads	Rs. 11,400
Gift to workers	Rs. 1,000

29. Prepare a reconciliation statement from the following details:

	Rs.
Net loss as per cost accounts	3,44,800
Net loss as per financial accounts	4,32,890
Works overhead under recovered in costing	6,240
Depreciation overcharged in costing	2,600
Interest on investments	17,500
Administrative overhead over recovered in costing	2,600
Goodwill written off	92,000
Stores adjustment in financial books (Cr.)	950
Depreciation of stock charged in financial books	13,500

30. Prepare a Reconciliation Statement from the following details:

Profit as per cost accounts was of Rs. 60,000, while the profit as per financial accounts was of Rs. 59,700. Values of opening & closing stock as shown in cost & financial accounts were as under:

	Financial Accounts	Cost accounts
	Rs.	Rs.
<i>Raw Materials:</i>		
Opening	25,300	25,000
Closing	30,000	29,600
<i>Work-in-Progress:</i>		
Opening	16,000	15,500
Closing	20,000	19,900

ESSAY TYPE QUESTIONS (10 MARKS)

31. From the following figures prepare a reconciliation statement between cost and financial records:

	Rs.
Net profit as per financial records	1,28,755
Net profit as per costing records	1,72,400
Works overhead under-recovered in costing	3,120
Administrative overhead recovered in excess	1,700
Depreciation charged in financial records	11,200

Depreciation recovered in costing	12,500
Interest received but not included in costing	8,000
Obsolescence loss charged in financial records	5,700
Income tax provided in financial books	40,300
Bank interest credited in financial books	750
Stores adjustment (Credit in financial books)	475
Depreciation of stock charged in financial books	6,750

32. From the following details, you are required to prepare a Reconciliation statement and also ascertain profit as per financial books.

Particulars	Cost Books	Financial Books
	Rs.	Rs.
1 Profit as per cost records	3,85,000	?
2 Works overheads	68,500	72,000
3 Administration overheads	92,750	1,02,650
4 Selling overheads	45,600	38,500
5 Depreciation	-	-
6 Stores adjustment (Credit) in P/L A/c	-	7,500
7 Value of opening stock	86,400	75,000
8 Value of closing stock	94,800	86,400
9 Reserve for bad debts	-	16,050
10 Interest on bank deposits received	-	16,750
11 Loss on sale of machinery	-	15,000
12 Tax provision	-	42,750
13 Interest on bank loan paid	-	18,250

33. From the particulars given below prepare the following

- A statement of cost as per cost accounts.
- Profit as per financial accounts.
- A reconciliation statement

<i>Raw materials:</i>	Rs.
Opening stock	6,000
Purchases	36,000
Closing Stock	9,000
<i>Finished goods :</i>	
Opening stock	10,000
Closing stock	2,000
Wages	10,000
Sales	85,000
Office expenses	8,000
Works expenses	10,000

As per the costing procedure factory overheads at 25% of prime cost and office overheads at 75% of factory overheads were charged.

34. A manufacturing company has two production Department namely A and B and three Service Depts. Time keeping, stores and maintenance.

	Production Dept.		Service Dept.		
	A	B	Time keeping S1	Stores S2	Maintenance S3
Primary Overhead Summary	20,000	30,000	4,000	3,000	2,000
Other Information	S1	S2	S3	A	B
No. Of Employees	-	10	5	40	25
No. Of Stores requisition	-	-	4	16	15
Machine hours	-	-	-	3,000	2,300

Prepare Overhead distribution summary under Step Method.

35. The modern co. is divide into four departments – A,B,C are producing departments and D is a service department. The actual costs for a period are as follows.

	Rs.
Rent	1,000
Repairs to plant	600
Depreciation on plant	450
Employer's liability for insurance	150
Supervision	1,000
Fire insurance in respect of stock	500
Power	900
Light	120

The following additional information are available in respect of the 4 departments:

Particulars	Dept. A	Dept. B	Dept. C	Dept. D
Area (sq. metres)	1,500	1,100	900	500
No. of employees	20	15	10	5
Total wages (Rs.)	6,000	4,000	3,000	2,000
Value of plant (Rs.)	24,000	18,000	12,000	6,000
Value of stock (Rs.)	15,000	9,000	6,000	-
H.P. of plant	24	18	12	6

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

36. A company has four departments A,B and C which are production departments and D which is a service department. Cost of the department 'D' is apportioned on the basis of wages paid.

The actual costs for the year 2012 were:

	Rs.		Rs.
Rent	21,000	Light & Power	2,100
Repairs to plant	1,26,000	Supervision	31,500
Depreciation of plant	9,450,	Repairs to building	8,400

The following information about departments is available and is used as a basis for distribution of costs:

Departments	Area Sq. metres	No. of employees	Wages paid Rs.	Value of plant Rs.
A	1500	20	1,26,000	3,15,000
B	1100	55	84,000	1,89,000
C	900	10	63,000	1,26,000
D	500	5	42,000	-

Apportion these costs to producing departments.

37. A company has 3 production departments and 2 service departments. Their respective expenditure are given below:

Production Departments	Service Departments
A - Rs.800	X - Rs.234
B - Rs.700	Y - Rs.300
C - Rs.500	

Service departments give service in the following manner to various departments.

Service Departments	A	B	C	X	Y
X	20%	40%	30%	-	10%
Y	40%	20%	20%	20%	

Show the distribution of service department overheads under simultaneous equation method.

38. You are supplied with the following information. Calculate overhead hourly rate in respect of production departments A,B, and C.

The Primary Overheads are:

Production Depts.	Rs.	Service Depts.	Rs.
A	7,810	X	4,000
B	12,543	Y	2,600
C	4,547		

Expenses of service departments X and Y are apportioned as under.

	A	B	C	X	Y
X	30%	40%	20%		10%
Y	10%	20%	50%	20%	

Estimated working hours are: A – 1000; B – 2500; C – 1400

39. The following data were obtained from the books of Arun Engineering Company for the half year ended 30th September. Prepare an overhead distribution summary and compute the departmental overhead rate for each of the production department assuming that overheads are recovered as a percentage of direct wages.

	Production Department			Service Department	
	A	B	C	X	Y
Direct Wages (Rs.)	7,000	6,000	5,000	1,000	1,000
Direct Material (Rs.)	3,000	2,500	2,000	1,500	1,000
No. of workers	200	150	150	50	50
Electricity (kwh.)	8,000	6,000	6,000	2,000	3,000
Light Points (No.)	10	15	15	5	5
Asset values (Rs.)	50,000	30,000	20,000	10,000	10,000
Area occupied (Sq. ft.)	800	600	600	200	200

The expenses during the period were:

	Rs.		Rs.
Sores overheads	400	Depreciation	6,000
Motive power	1,500	Repairs and maintenance	1,000
Lighting	200	General overheads	10,000
Labour Welfare	3,000	Rent and taxes	600

Apportion expenses of department X in the ratio of 4:3:3 and that of department Y in proportion direct wages to departments A,B and C respectively.

40. Compute Machine Hour Rate from the following data:

Cost of machine	Rs. 1,00,000
Installation charges	10,000
Estimated scrap value after the expiry of its life(15 years)	5,000
Rent and rates for the shop per month	200
General lighting for the shop for the month	300
Insurance premium for the machine per annum	960
Repairs and maintenance expenses per annum	1000
Power consumption – 10 units per hour	
Rate of power per 100 units	20
Estimating working hours per annum – 2200	
This includes setting up time of 200 hours	
Shop supervisor's salary per month	600

The machine occupies 1/4th of the total area of the shop. The supervisor is expected to devote 1/5th of his time for supervising the machine.

UNIT – V

CHOOSE THE CORRECT ANSWER

1. Job costing is the most suitable method for
 - a) Oil processing units;
 - b) Transport companies
 - c) Sugar industry
 - d) Repair shops
2. Job cost is usually estimated on the basis of
 - a) Customer's specifications
 - b) Production cost
 - c) Competitor's prices
 - d) Govt. regulations
3. Batch costing is useful to determine
 - a) Maximum quantity of output
 - b) Minimum quantity of output
 - c) Economic batch quantity
 - d) None of these
4. Contract costing is the most appropriate method of costing for
 - a) Construction industry
 - b) Banking industry
 - c) Textile mills
 - d) Cement industry
5. Process costing is suitable to industries where
 - a) Production is carried on in two or more consecutive stages
 - b) Production is as per customer specifications
 - c) Specialised services are rendered
 - d) Contracts are undertaken
6. Process cost is ascertained and recorded in
 - a) Balance sheet
 - b) Profit and loss account
 - c) Separate statement
 - d) Separation account in ledger
7. Scrap value of normal loss is
 - a) Credited to P&L A/c
 - b) Show in balance sheet
 - c) Credited to process A/c
 - d) Debited to process A/c

8. Operation costing is a
- Method of costing
 - Technique of costing
 - Norm of costing
 - Procedure of costing
9. Operating costing is more useful in
- Manufacturing industries
 - Service industries
 - Trading organizations
 - None of these
10. Standing charges per Hour
- Semi-variable
 - Fixed
 - Variable
 - None of these

Answers: 1. (d) 2. (a) 3. (c) 4. (a) 5. (a) 6. (d) 7. (c) 8. (a) 9. (b) 10. (b)

SHORT QUESTIONS (2 MARKS)

- State the meaning of job costing.
- What is operating costing?
- Quote any two examples for application of job costing.
- What is Abnormal Gain?
- What is Normal Loss?
- What do you mean by contract costing?
- What is batch costing?
- What are the features of process costing? Give any two.
- Calculate the profit which can be credited to profit and loss account:
 Notional profit .79,000
 Work certified Rs. 4,00,000
 Cash received Rs.3,30,000
 Contract price Rs.6,00,000
- Define 'unit costing'.

PARAGRAPH QUESTIONS (5 MARKS)

21. The following process, calculate units of abnormal loss in each cases.

	Process A	Process B	Process C
Inputs (units)	5000	-	-
Outputs (units)	4250	3000	2000
Normal loss (% of input)	10%	20%	25%

22. The following information is available from the job ledger in respect of Job No. 777.

Materials Rs. 3,400

Wages 80 hours at Rs. 2.50

Variable overheads incurred for all jobs are Rs. 6,000 for 4000 labour hours.

Calculate the profit earned on Job No. 777 if it is billed for Rs. 4,220.

23. The following particulars relate to ascertain contract carried out by Lavanya Builders during the year ended 30 June 1998.

	Rs.		Rs.
Work certified	1,43,000	Establishment charges	3,250
Materials issued	64,500	Direct charges	2,600
Labour cost	54,800	Wages accrued due	1,800
Plant installed	11,300	Materials closing balance	1,400
Value of plant (closing)	8,200	Material returned to site	400
Cash received	1,30,000		
Contract price	2,00,000		

Prepare contract account and transfer to the profit and loss account the portion of the profit which you considered reasonable.

24. In Process X, 100 units of raw materials. Bought at the rate of Rs.10 p.u. were introduced. Other expenditure incurred in the process was Rs.800. Normal loss is 10% of the input. The scrap value of normal loss units Rs.3 p.u. The output of process X was only 75 units. Prepare process X account.

25. The following was the expenditure on a contract for Rs.6,00,000. Work commenced in January 2012.

	Rs.
Materials	1,20,000
Wages	1,64,400
Plant	20,000
Business expenses	8,600

Cash received on account was Rs.2,40,000 being 80 percent of work certified. Value of materials on hand at 31.12.2012 was Rs.10,000. Prepare the contract account for 2012 showing the profit to be credited to profit and loss account. Plant is to be depreciated at 10 percent.

26. A transport company operates 4 buses on a route of 100 km long. Each bus makes 3 round trips per day on all 30 days in a month. On an average 20% of the vehicles are in garage for repairs and maintenance. Ascertain the total running kilometers in one month period.

27. Jothi printers undertook two jobs during the 1st week of June 2012. The following details are available.

	Job 501	Job 601
	Rs.	Rs.
Material supplied	40,000	20,000
Wages paid	9,000	6,000
Direct expenses	2,000	1,000
Materials transfer from job 601 to 501	2,000	2,000
Materials returned to stores	-	1,000

Find out the cost of each job and profit or loss if any, assuming that job 601 is completed and invoiced to the customer at Rs.30,000.

28. In process "B" 75 units of a commodity were transferred from process "A" at a cost of Rs.1310. the additional expenses incurred by the process were Rs.190. 20% of the units entered are normally lost and sold at Rs.4 per unit. The output of the process was 70 units. Prepare "B" Account.

29. Product A passes through two processes I and II and then to Finished Stock. From the following data prepare the Process A/c's:

<i>Particulars</i>	<i>Process I</i>	<i>Process II</i>
Input	2,000	1,900
Material consumed	30,000	20,000
Wages	20,000	20,000
Overhead	7,200	6,170
Normal Loss	5%	10%
Scrap Value (per unit)	2	3

30. Union Transport Co. supplies the following details in respect of a truck of 5-tonne capacity:

Cost of truck	Rs. 90,000
Estimated life	10 years
Diesel, oil, grease	Rs. 15 per trip each way
Repairs and maintenance	Rs. 500 per month
Driver's wage	Rs. 500 per month
Cleaner's wage	Rs. 250 per month
Insurance	Rs. 4,800 per year
Tax	Rs. 2,400 per year
General supervision charges	Rs. 4,800 per year

The truck carries goods to and from city covering a distance of 50 miles each way. While going to the city freight is available to the extent of full capacity.

Assuming that the truck runs on an average 25 days a month, work out:

- i) Operating cost per tonne-mile, and
- ii) Rate per ton per trip that the company should charge if profit of 50% on freightage is to be earned.

ESSAY TYPE QUESTIONS (10 MARKS)

31. A factory uses job costing. The following data are obtained from its books for the year ended 31st December 2016.

	Rs.		Rs.
Direct materials	90,000	Selling and distribution overheads	52,500
Direct wages	75,000	Administrative overheads	42,000
Profit	60,900	Factory overheads	45,000

Prepare a job cost sheet indicating the prime cost, works cost, production cost, cost of sales and sales value.

In 2002, the factory receives an order for a number of jobs. It is estimated that direct materials required will be Rs.1,20,000 and direct labour will cost Rs. 75,000. What should be the price for these jobs if factory intends to earn the same rate of profit on sales assuming that the selling and distribution overheads have gone up by 15%? The factory recovers overheads as a percentage of direct wages and administration and selling and distribution overheads as a percentage of works cost, based on cost rates prevailing in the previous year.

32. A Transport Service Company is running 4 buses between two towns which are 50kms. Apart. Seating capacity of each bus is 40 passengers. The following particulars were obtained from their books for April, 2010:

Wages of driver, conductors and cleaners rs.2,400; Salaries of Office and Supervisory staff Rs.1,000; Diesel oil and other oils Rs.4,000; Repair and maintenance Rs.800; Taxation, Insurance, etc. Rs.1,600; Depreciation Rs.2,600; Interest and other charges Rs.2,000.

Actual passengers carried were 75% of the seating capacity. All the four buses ran on all the days of the month. Each bus made one round trip per day. Find out cost per passenger km.

33. Lakshmi Industries Ltd., is engaged in the manufacture of chemical X which is obtained after it passes through three distinct processes. You are required to prepare Process Accounts, abnormal gain and abnormal loss accounts.

	Process I	Process II	Process III
Materials	Rs.5,200	Rs.3,960	Rs.5,924
Direct wages	Rs.4,000	Rs.6,000	Rs.8,000

Production overheads Rs.18,000

1,000 units at Rs.6 per unit were introduced in process- I production overhead is to be distributed at 100% on wages.

	Actual output	Normal Loss	Value of Scrap P.U
Process I	950	5%	Rs.4
Process II	840	10%	Rs.8
Process III	750%	15%	Rs.10

34. A product passes through three distinct processes to completion. During March 2013, 500 units were produced. From the following information, prepare process accounts showing the total cost as well as cost per unit.

	Process I	Process II	Process III
	Rs.	Rs.	Rs.
Material	10,000	7,000	3,000
Labour	2,500	2,000	2,500
<i>Direct expenses:</i>			
Fuel	500	1,000	500
Carriage	1,500	500	1,000
Work overheads	2,000	2,500	2,000

Indirect expenses Rs.14,000 should be apportioned on the basis of wages.

35. A company undertook a contract for construction of a large building. The following data are related with 31st March 2011.

	Rs.
Contract price	35,00,000
Work certified	20,00,000
Progress payment received	15,00,000
Materials issued	7,50,000
Planning and estimating cost	1,00,000
Direct wages	4,00,000
Materials returned from site	25,000
Plant hire charges	1,75,000
Wages related to costs	50,000
Site office costs	67,800
Head office exps.	37,500
Site expenses	90,200
Work not certified	14,900

The contractors own a plant which originally cost Rs.2,00,000 has been used. The residual value of the plant after 5 years of life is expected to be Rs.50,000; Depreciation is charged under straight line method.

On 31st March 2011 the direct wages due amount Rs.27,000 and materials were Rs.20,000. Prepare contract account for the year ended 31st March 2011.

36. The following information related to Contract No. 123:

Contract price	-	Rs. 6,00,000
Wages	-	Rs. 1,64,000
General expenses	-	Rs. 8,600
Raw materials	-	Rs. 1,20,000
Plant	-	Rs. 20,000

As on date, cash received was Rs.2,40,000 being 80% of work certified. The value of materials remaining at site was Rs.10,000. Depreciate plant by 10%. Prepare contract account showing profit to be credited to P & L account.

37. M/s Pine Corporation undertook a contract for Rs. 2,40,000. You are requested to prepare the Contract A/c and Contractee's and Work-in-Progress A/c for the year ended 31st December 2006 from the following information:

Material purchased	30,000
Wages paid	50,000
Wages unpaid	10,000
Other charges	12,000
Plant purchased	20,000
Cash received	1,28,000
(Being 80% of work certified)	
Material lying at site on 31.12.06.	4,000
Plant at site on 31.12.06.	18,000

10% of value of material and 15% of wages may be considered as being incurred for the proportion of works completed but not certified. Other charges are charged as a proportion of direct wages.

38. The following are the details of Process X, Process Y and Process Z:

	Process X	Process Y	Process Z
Input units	2,000	1,840	1,740
Normal loss unit	10%	5%	10%
Direct Material	40,000	60,400	69,240
Wages	70,000	84,520	1,00,000
Overhead	30,000	40,000	50,000
Scrap value (per unit)	25	50	60

Output of Process Z is 1,600 units. Prepare the necessary Accounts.

Stock in process is valued at Prime Cost and Finished stock at the price at which it is received from process III.

Find out the amount of provision to be made to offset the inter-process profits added.

39. Product —Lotusl is obtained after it passes three distinct process. The following information is obtained from the accounts for the month ending December 31, 2002

Items	Total	Process		
		I	II	III
		Rs.	Rs.	Rs.
Direct material	5,829	2,650	1,916	763
Direct wages	10,000	3,500	4,000	2,500
Production overhead	12,000			

1000 units o process I. There was no stock of material or work in progress at the beginning or end of the period. The output of each process direct to the next process and finally to finished stores production overhead is recovered of 100 percent of direct wages. The following additional data are obtained.

Process	Output during the month	Percentage of Normal loss to input	Value of per unit
I	940	5%	Rs.3
II	850	10%	Rs.4
III	755	10%	Rs.5

Prepare process accounts and Normal loss accounts, Abnormal loss accounts.

40. Shanker has been promised a contract to run a tourist car on a 20 km. long mute for the chief executive of a multinational firm. He buys a car costing Rs.1,50,000. The annual cost of insurance and taxes are Rs. 4,500 and Rs.900 respectively. He has to pay Rs.500 per month for a garage where he keeps the car when it is not in use.

The annual repair costs are estimated at Rs.4,000. The car is estimated to have a life of 10 years, at the end of which the scrap value is likely to be Rs.50,000.

He hires a driver who is to be paid Rs.300 per month plus 10% of the takings as commission. Other incidental expenses are estimated at Rs.200 per month. Petrol and oil will cost Rs.100 per 100 kms. The car will make 4 round trips each day. Assuming a profit of 15% on takings is desired and that the car will be on the road for 25 days on an average per month what should he charge per round-trip?
