

COST ACCOUNTING
II BCOM CA
IMPORTANT TWO MARK QUESTIONS
UNIT - I

1. Define Costing.

According to ICMA, London, cost accounting is “The Process of accounting for cost which begins with the recording of income and expenditure and ends with the preparation of periodical statements and reports for ascertaining and controlling costs”.

2. What is Cost Accounting?

Cost Accounting is the process of accounting for cost which begins with the incurrence of cost and ends with the control of cost. In other words, it is a formal system of accounting by means of which costs of products, services or activities are ascertained and controlled.

3. What is Cost Unit?

A cost unit refers to a units of product, service or time in relation to which costs may be ascertained or expressed. In other words, cost unit is the units of output for which cost is ascertained. For example, the cost of air-conditioner is ascertained per unit.

4. Cost Centre – Explain?

A cost center is a location, person or item or equipment for which cost may be ascertained and used for the purposes of cost control. In simple words, it is a sub-division of the organization to which costs can be charged. A cost center can be (a) Location, (b) Person (C) an item of equipment.

5. What are the elements of Cost?

Total cost of a product is composed of three elements. They are Material, labour and other expenses. Each of these elements may be further divided into two parts- Direct and indirect costs.

6. What are the methods of Costing?

Important methods of costing are Job Costing, contract costing, Batch costing, Process costing, Unit costing, Operating costing and multiple costing.

7. What are the different Techniques of Costing?

Following are the different Techniques that are used for the purpose of ascertaining costs.

Historical costing

Direct costing

Absorption costing

Uniform costing

Marginal costing

Standard costing

8. What are the objectives of Costing?

Analysis and Ascertainment of costs.

Cost control.

Ascertainment of profitability.

Determination of selling price.

Providing a basis for business policy.

9. What is Prime Cost?

Prime cost = Direct material + Direct labour + Direct expenses

10. What are the advantages of Cost Accounting?

Helps in decision making, Helps in Fixing prices, Avoidance of wastage, Highlights causes, Reward to efficiency, Prevention of fraud, Facilitates control.

UNIT - II

1. What is material Cost?

Material cost is the cost of material of any nature used for the purpose of production of a product or a service. It includes cost of materials, freight inwards, taxes & duties, insurance ...etc directly attributable to acquisition, but excluding the trade discounts, duty drawbacks and refunds on account of excise duty and vat.

2. What is perpetual inventory?

Perpetual inventory system is also known as “Automatic Inventory System”. It is an important aid to material control. Its main object is to make available details about the quantity and value of the stock of each item, at all times. It consists of maintaining records for each type of material showing the quantities and value of material received, issued and in stock. It also converts contentious stock taking.

3. What is periodical inventory?

Periodical Inventory verifies the stock only at the end of the accounting period, usually a year.

4. What is Bin Card?

Bin is a place, rack or cupboard, where material are kept. Each bin has a card to show the position of stock in the bin. This card is known as bin card or stores card. Only quantities are entered in the bin card. These cards are used not only for recording of receipts and issues of stores but also to assist the store keeper to control the stock.

5. What is store-ledger?

Stores ledger is kept in the costing department. It contains accounts for each class of material. It is usually maintained in the loose leaf form. It is written up by the stores accountant or stores clerk. Stores ledger contain the particulars regarding maximum and minimum level of stock, re-order level, re-order quantity, description of material, code number at the head of the account.

6. Explain Bill of Materials.

A bill of material gives a complete list of materials required for a particular job or work order. It is generally prepared by the planning department as soon as the work order is received. When the job is started, all the materials listed in the bills are sent to the production department.

7. What do you understand by ABC analysis?

The “ABC Analysis” is an analytical method of stock control which aims at concentrating efforts on those items where attention is needed most. It is based on the concept that a small number of the items in inventory may typically represent the bulk money value of the total materials used in production process, while a relatively large number of items may present a small portion of the money value of stores used resulting in a small number of items be subjected to greater degree of continuous control.

8. What is maximum level in Cost Accounting?

The Maximum Level indicates the maximum quantity of an item of material that can be held in stock at any time. The stock in hand is regulated in such a manner that normally it does not exceed this level.

9. What is minimum level in cost Accounting?

The Minimum Level indicates the lowest quantitative balance of an item of material which must be maintained at all times so that there is no stoppage of production due to the material being not available.

10. What is re-order level?

When the stock in hand reach the ordering or re-ordering level, store keeper has to initiate the action for replenish the material. This level is fixed somewhere between the maximum and minimum levels in such a manner that the difference of quantity of the material between the Re-ordering Level and Minimum Level will be sufficient to meet the requirements of production up to the time the fresh supply of material is received.

UNIT III

1. What is Direct Labour?

The cost of employees which can be attributed to a cost object in an economically feasible way. In simple words, it is that labour which can be conveniently identified or attributed wholly to a particular job, product or process or expended in converting raw materials into finished goods. Wages of such labour are known as direct wages. Thus it includes payment made to the following groups of labour:

- (i) Labour engaged on the actual production of the product or in carrying out of an operation or process.
- (ii) Labour engaged in adding the manufacture by way of supervision, maintenance, tool setting, transportation of material etc.
- (iii) Inspectors, analysts etc., specially required for such production.

2. What is Indirect Labour?

The labour / employee cost which cannot be directly attributed to a particular cost object. The wages of that labour which cannot be allocated but which can be apportioned to or absorbed by cost centres or cost units is known as Indirect Labour. In other words paid to labour which are employed other than on production constitute indirect labour costs. Example of such labour are: charge-hands and supervisors; maintenance workers; men employed in service departments,

material handling and internal transport; apprentices, trainees and instructors; clerical staff and labour employed in time office and security office.

3. What are the methods of Time Keeping?

- Time recording clocks or clock cards
- Disc method
- Attendance record

4. What is Job card?

This card is a combined record, which shows both, the time taken for completion of the job as well as the attendance time. Therefore there is no need to keep separate record of both, time taken and attendance time.

5. What is idle time?

Idle time is defined as the difference between the time for which the workers are paid and the time they actually spend on production. It is the time for which payment is made but no production is obtained. Idle time arises only when the wages are paid on time basis. It does not arise when the wages are paid on piece rate basis.

6. What is overtime?

Overtime is time worked beyond normal working hours. A worker who works more than 9 hours on any day or 48 hours in a week, is entitled to overtime payment. According to the Factories Act 1978, the amount for overtime is double the normal rate of wages. If the Factories Act does not apply, Establishment Act will apply, according to this act, overtime has to be paid at 1 ½ times the normal rate of wages. The excess paid over usual normal rate is called overtime premium.

7. What is Labour Turnover?

Workers may come and go. This is a normal feature in every business organization. The movement of shifting into and out of the organization by the employees is known as labour turnover.

8. What is Halsey plan?

This plan was introduced by F.A. Halsey, an American engineer. In this plan, bonus is paid on the basis of time saved. Standard time is fixed for a job and if the actual time taken is less than the same, the worker becomes eligible for bonus. However bonus is paid equal to wages of 50% of the time saved. A worker is assured of time wages if he takes longer time than the allowed time. The formula for computing the total wages is as follows.

Total Earnings = $H \times R + 50\% [S - H] R$

Where, H = Hours worked, R = Rate per hour, S = Standard time

9. What is Rowan plan?

This premium bonus plan was introduced by Mr. James Rowan. It is similar to that of Halsey Plan in respect of time saved, but bonus hours are calculated as the proportion of the time taken which the time saved bears to the time allowed and they are paid for at time rate. The formula for computation of total earnings is as follows:-

$$\text{Total Earnings} = H \times R + [S - H]/S \times H \times R$$

Where H = Hours worked, R = Rate per hour, S = Standard time.

10. What are the methods of measurement of labour turnover?

Separation method

Replacement method

Flux Method

UNIT IV**1. Define Overhead.**

Overheads comprise of indirect materials, indirect employee cost and indirect expenses which are not directly identifiable or allocable to a cost object. Overheads may defined as the aggregate of the cost of indirect material, indirect labour and such other expenses including services as cannot conveniently be charged directly to specific cost units. Thus overheads are all expenses other than direct expenses. In general terms, overheads comprise all expenses incurred for or in connection with, the general organization of the whole or part of the undertaking, i.e., the cost of operating supplies and services used by the undertaking and includes the maintenance of capital assets.

2. What is Factory overheads?

Factory overheads are also called manufacturing overhead, works overhead or factory on cost. Factory overhead cover all expense incurred from the stage of raw materials to finished goods. It includes indirect material, indirect labour and indirect expenses in producing an article. E.g., factory rent, supervisor's salary, power and fuel, heating and lighting, depreciation of factory building, consumable stores etc.,

3. What is selling overheads?

These are expenses incurred for actual sales and promotion of sales. Eg., Salaries of sales manager, commission, traveling expenses of salesman and promotion expenses like advertisement and publicity, after sales service etc.,

4. What is Cost allocation?

CIMA defines Cost Allocation as, 'the charging of discrete, identifiable items of cost to cost centers or cost units'. In simple words complete distribution of an item of overhead to the departments or

Products on logical or equitable basis is called allocation. Where a cost can be clearly identified with a cost center or cost unit, then it can be allocated to that particular cost center or unit.

5. What is Cost absorption?

Ultimately the indirect costs or overhead as they are commonly known, will have to be distributed over the final products so that the charge is complete. This process is known as cost absorption, meaning thereby that the costs absorbed by the production during the period. Usually any of the following methods are adopted for cost absorption - (i) Direct Material Cost Percentage (ii) Direct Labour Cost Percentage (iii) Prime Cost Percentage (iv) Direct Labour Hour Rate Method (v) Machine Hour Rate, etc. The basis should be selected after careful maximum accuracy of Cost Distribution to various production units. The basis should be reviewed periodically and corrective action whatever needed should be taken for improving upon the accuracy of the absorption.

6. What is under absorption?

If the amount absorbed is less than the amount incurred, which may due to actual expenses exceeding the estimate and / or the output or the hours worked may be less than the estimate, the difference denotes under-absorption.

7. What is over absorption?

The amount of overhead absorbed in costs is the sum total of the overhead costs allotted to individual cost units by application of the overhead rate. When a predetermined rate worked out on the basis of anticipated or budgeted overhead and base is applied to the actual base, the amount absorbed may not be identical with the amount of overhead expenses incurred if either the actual base or the actual expenses or both deviate from the estimates or the budget.

8. What is machine hour rate?

A machine hour rate may be calculated using only those overheads which are directly related to the machine e.g. power, fuel, repairs, maintenance, depreciation etc. These expenses are totalled and then divided by the hours to compute the rate. This is called as Ordinary Machine Hour Rate.

9. How machine hour rate is calculated?

$$\text{Machine hour rate} = \frac{\text{Factory over heads}}{\text{Machine hours for the period}}$$

10. What standing charges?

Standing charges are those expenses which are constant irrespective of the use of machine. These expenses for each machine are to be totalled and is divided by the normal working hours. This will give hourly rate of standing charges.

UNIT V

1. What is Job Costing?

Job Costing is a method of ascertaining costs of an individual job or work order separately. Each Job is treated as a cost unit for which costs are accumulated. Job costing is useful in industries which manufacture a variety of products according to the specifications of customers. Since the jobs have different specifications, it is necessary to record the costs for each job individually. In short, Job costing shows the costs and profit of each job separately.

2. What is contract costing?

Contract cost is the cost of contract with some terms and conditions between contractee and contractor. This method is used in undertakings, carrying out, building or constructional contracts like constructional engineering concerns, civil engineering contractors. The cost unit here is a contract, which may continue over more than one financial year.

3. Explain uncertified work.

In the Balance Sheet, the work-in-progress is usually shown under two heads, viz. certified and uncertified. The cost of work completed and certified and the profit credited will appear under the head 'certified' work-in-progress, while the completed work not yet certified and the cost of labour, material and expenses of work which has not reached the stage of completion are shown under the head 'uncertified' work-in-progress.

4. What is Work-in-progress?

Work in process (WIP), work in progress (WIP), goods in process, or in-process inventory are a company's partially finished goods waiting for completion and eventual sale or the value of these items. These items are either just being fabricated or waiting for further processing in a queue or a buffer storage.

5. What is process costing?

Process costing is that aspect of operation costing which is used to ascertain the cost of the product at each process or stage of manufacture. This method of accounting is used in industries where the process of manufacture is divided into two or more processes. The objective is to find out the total cost of the process and the unit cost of the process for each and every process. Usually the industries where process costing is used are textile, oil industries, cement, pharmaceutical etc.

6. What is abnormal gain?

We know that margin allowed for normal loss is an estimate, (i.e., on the basis of expectation in process industries in normal conditions) and slight differences are bound to occur between the actual output of a process and that anticipated. These differences will not always represent increased loss, on occasions the actual loss will be less than that expected. Thus, when actual loss in a process is smaller than that was expected, an abnormal gain results. The value of the gain will be calculated in similar manner to an abnormal loss.

The Abnormal Gain Account is to be debited for the loss of income on account of less quantity of sale of scrap available as a result of abnormal gain and Normal Process Loss Account credited accordingly. The balance is transferred to Costing Profit and Loss Account as abnormal gain.

7. What is inter process profit?

8. What is operating costing?

Cost Accounting has been traditionally associated with manufacturing companies. However in the modern competitive market, cost accounting has been increasingly applied in service industries like banks, insurance companies, transportation organizations, electricity generating companies, hospitals, passenger transport and railways, hotels, road maintenance, educational institutions, road lighting, canteens, port trusts and several other service organizations. The costing method applied in these industries is known as 'Operating Costing'.

9. What is Standing Charges?

Standing charges are those expenses which remain constant irrespective of the use or running of machine and examples of such expenses are rent and rates, lighting and heating, insurance, supervising labour etc. Machine expenses as power, fuel, depreciation, repairs etc. vary with the use of the machine.

10. What are the types of cost unit?

The cost unit is of two types. They are Simple cost unit and Composite Cost unit.

Simple cost unit: In this case, there is only one variable e.g., Per bed or per patient in the case of hospitals, per meal or per cup of coffee in the case of hotels, per cubic meter in the case of gas supply, per man-show in the case of cinema etc.,

Composite Unit: In this case, two or more variables are combined e.g., per tonne Km in the case of goods transport, per passenger Km in the case of passenger transport.

IMPORTANT 5 & 10 MARKS QUESTIONS

1. What are the objectives of Cost Accounting?

1. Analysis and Ascertainment of Costs
2. Cost Control
3. Ascertainment of Profitability
4. Determination of selling price
5. Providing a Basis for Business policy

2. What are the Advantages of Cost Accounting?

1. Profitable and Unprofitable activities are disclosed
2. Enables a concern to measure the efficiency
3. Provides information upon Estimates and Tenders
4. Guides Future policies
5. Helps in Increasing Profits
6. Periodical Determination of profit or losses
7. Furnished reliable data

8. Detect Exact Cause of Decrease or Increase

3. Explain the different methods of costing.

1. Job costing
2. Contract Costing
3. Batch Costing
4. Process Costing
5. Unit costing
6. Operating Costing
7. Multiple Costing

4. Distinguish between Time and Piece rate system

| | Time rate system | Piece rate system |
|----|---|---|
| a. | Minimum wages are guaranteed | Minimum wages are not guaranteed |
| b. | It is suitable to learners and beginners | It is not suitable to learners and beginners |
| c. | This pertains to hours of work | This pertains to output. |
| d. | Cost reduction is not possible | Cost reduction is possible. |
| e. | Individual efficiency is not accounted | Individual efficiency is measured and accounted. |
| f. | Idle time is paid with wags | Idle time is not paid for wages |
| g. | Quality of work is more important than the quantity of work | Quantity of work is more important than the quality of work |
| h. | Inefficiency is not penalized | Inefficiency is penalized. |

5. Distinguish between Halsey Plan and Rowan Plan.

| | Halsey Plan | Rowan Plan |
|---|---|---|
| A | Gains of efficiency are shared by employer and employee equally | Gains of efficiency are not shared equally |
| B | Bonus increases steadily with increase in efficiency | Bonus increases up to 50% of savings in standard time and thereafter declines |
| C | If the time saved is more than 50% of the standard time, this plan is better. | If the time saved is less than 50% of the standard time, this plan is better. |
| D | Bonus is 50% of the time saved | Bonus is that proportion of the time saved which the time taken bears to the standard time. |

6. What are the classification of Overheads?

1. **Classification according to nature**
 - a. **Indirect materials**
 - b. **Indirect labour**
 - c. **Indirect Expenses**
2. **Classification according to function**
 - a. **Factory overheads**
 - b. **Administrative overheads**

- c. Selling overheads
- d. Distribution overheads
- 3. Classification according to Variability
 - a. Fixed overheads
 - b. Variable overheads
 - c. Semi-variable overhead
- 4. Classification according to normality
 - a. Normal overheads
 - b. Abnormal overheads
- 5. Classification according to controllability
 - a. Controllable overheads
 - b. Uncontrollable overheads

7. Give the Specimen of Cost Sheet.

| | | |
|--------------------------------------|-------|-------|
| | | |
| Opening Stock or raw materials | ***** | |
| Add: Purchase of raw materials | ***** | |
| | ***** | |
| Less: Closing stock of raw materials | | |
| Raw materials consumed | | ***** |
| Direct waes | | ***** |
| Direct expenses | | ***** |
| Prime cost | | ***** |
| Factory overhead | | ***** |
| Add: opening work in progress | | ***** |
| Less: Closing work in progress | | ***** |
| Work cost | | ***** |
| Administrative overheads | | ***** |
| Cost of production | | ***** |
| Add: Opening stock of finished goods | | ***** |
| Less Closing stock of finished goods | | ***** |
| Cost of Goods sold | | ***** |
| Selling and distribution overheads | | ***** |
| Cost of sales | | ***** |
| Profit | | ***** |
| Sales | | ***** |

**ANNAI VAILANKANNI ARTS AND SCIENCE COLLEGE, THANJAVUR
POST GRADUATE DEPARTMENT OF COMMERCE – COMPUTER APPLICATIONS
II BCOM CA**

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.

PROBLEMS BASED ON PURCHASE PRICE COMPUTATION

1. After inviting tenders, two quotations are received as follows:

Supplier A: Rs.1.20 per unit

Supplier B: Rs.1.10 per unit with Fixed Charge of Rs.3000

a. Calculate the order quantity for which the purchase price per unit will be the same.

b. The purchase manager wants to place an order for 15000 units. Which supplier would you select?

2. A supplier quotes as follows for material X:

200 unit @ Rs.5 each.

400 units @ Rs.4.50 each.

600 units @ Rs.4.00 each.

He allows a trade discount of 25% and cash discount of 3% if payment is made within 15 days. Freight charges per order is Rs.200. Containers are charged at Rs.15 each.

One container is required for every 100 units and if the containers are returned within 2 months, credit would be received at Rs.5 each. If the purchaser places an order for 600 units, calculate the material cost.

3. A consignment consists of two chemicals X and Y. The invoice gave the following data:

| | Rs. |
|------------------------------------|-------|
| Chemical X-4000 kgs @ Rs.5 per Kg | 20000 |
| Chemical Y 2000 kgs. @ Rs.4 per Kg | 8000 |
| Sales tax @ 5% | 1400 |
| Railway freight | 600 |
| | 30000 |

A shortage of 200 kgs in X and 100 kgs. In Y was noticed due to breakage. Ascertain the effective cost of the material per Kg, if provision has to be made for a further wastage of 5% due to careless handling of material X and Y.

4. A lorry load of material of different grades was purchased for Rs.300000. Materials are sorted into the following grades whose market price is shown against each of them.

| | Units | Selling price per unit |
|-----------|-------|------------------------|
| Grade I | 20000 | Rs.12 |
| Grade II | 15000 | Rs.10 |
| Grade III | 10000 | Rs.6 |

PROBLEMS BASED ON COMPUTATION OF STOCK LEVEL

5. Find out the Re-Order level. Maximum usage 300 units, Minimum usage 200 Units. Re-Order period 8 to 10 days.

6. Find out the maximum consumption. Re-order level 4000 units, Minimum level 2000 units, Re-order period 2 to 4 weeks.
7. If the minimum stock level and average stock level are 30000 and 50000 units respectively, find out the Re-order quantity of the material.
8. From the following information calculate a) Maximum Stock level b) Minimum stock level c) Re-order level.

| | |
|---------------------|-------------------|
| Minimum consumption | 240 units per day |
| Normal consumption | 300 units per day |
| Maximum Consumption | 420 units per day |
| Re-order Quantity | 3600 units |
| Re-Order period | 10 to 15 days |
| Normal order period | 12 days |

9. From the following particulars, calculate a) Maximum Level b) Minimum level, c) Re-Order level

| | |
|-------------------------|-------------------|
| Normal usage | 100 units per day |
| Minimum usage | 60 units per day |
| Maximum usage | 130 units per day |
| Economic order quantity | 50000 units |
| Re-order period | 25 to 30 days |

10. Calculate the minimum stock level, maximum stock level and re-order level from the following information.

Minimum Consumption 100 kgs per day, Maximum consumption 150 kgs per day, Normal consumption 120 kgs per day, Re-order period 10-15 days, Re-order quantity 1500 kgs, Normal re-order period 12 days, Time for emergency supplies 3 days.

PROBLEMS BASED ON ECONOMIC ORDER QUANTITY

11. Calculate Economic order Quantity

Annual Requirements – 3600 Kgs.

Cost of placing and receiving one order Rs.10

Annual carrying and storage cost Rs.20 per unit.

12. 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

13. Find out the Economic ordering quantity from the following:

Annual usage Rs.120000, cost of placing an order Rs.15

Annual carrying cost 10% of inventory value.

14. Cost of material is Rs.30 per unit. Total annual needs are 800 units. Annual return on investments is 10%, Rent, Insurance and taxes per unit, per annum Rs.1 per unit. Cost of placing an order is Rs.100. Calculate the Economic Order Quantity.

15. From the following particulars given below, calculate Economic Order Quantity and the number of orders to be placed per year.

Total consumption of material per year 10000 kgs. Buying Cost per order Rs.50. Units costs of material Rs.2 per Kg. Carrying and storage cost – 8% on average inventory.

16. The daily demand for a mechanical part is about 25 units. Every time an order is placed, a fixed cost of Rs.25 is incurred. The daily holding cost per unit is 40 paise. Determine the economic lot size.

PROBLEMS BASED ON PRICING OF MATERIALS ISSUED

17. From the following details, prepare the stores ledger account by adopting FIFO method. What would be the value of stock at the end of the period?

| | |
|----------------|---|
| Dec., 1 | Opening stock 1000 units @ Rs.2.00 each |
| 3 | Purchased 800 units at Rs.2.10 each |
| 5 | Issued 1200 units |
| 10 | Purchased 1600 units at Rs.2.10 each |

18. Ravi who newly set up a factory uses cost price as the basis for charging out materials to jobs. The receipts side of the stores ledger account shows the following particulars.

500 articles bought at Rs.3.00 each

700 articles bought at Rs.3.10 each

Successive issues of 300 units and 600 units were made. At what price should each of these issues be made under LIFO method?

19. From the following particulars, prepare stores ledger adjustment account under FIFO method.

| Date | Particulars | Unit | Rate per Unit |
|-----------|-------------|------|---------------|
| 2 | Purchases | 200 | 200 |
| 4 | Issued | 150 | - |
| 6 | Purchases | 200 | 220 |
| 10 | Issued | 100 | - |
| 16 | Purchases | 200 | 210 |
| 18 | Issued | 220 | - |
| 24 | Purchases | 150 | 230 |
| 25 | Issued | 190 | - |
| 28 | Issued | 30 | - |

20. Show the year end value of inventory under FIFO method.

| QUARTER | RECEIVED | | ISSUED UNITS |
|---------|----------|------------|--------------|
| | UNITS | Rate (Rs.) | |
| I | 20000 | 2.25 | 16000 |
| II | 30000 | 2.50 | 20000 |
| III | 25000 | 2.40 | 33000 |
| IV | 10000 | 2.60 | 7000 |

Assume that purchase were made on the first day of the quarter.

21. The stock of a material as on 1st April was 200 units at Rs.2 each. The following purchases and issues were made subsequently. Prepare Stores Ledger Account showing how the value of the issues would be recorded under a) FIFO method and b) LIFO method.

| DATE | PARTICULARS | UNITS AND RATES |
|---------|-------------|-----------------------|
| APRIL 5 | Purchase | 100 units @ 2.20 each |
| 10 | Purchase | 150 units @ 2.40 each |
| 20 | Purchase | 180 units @ 2.50 each |
| 2 | Issues | 150 units |
| 7 | Issues | 100 units |
| 12 | Issues | 100 units |

| | | |
|----|--------|-----------|
| 28 | Issues | 200 units |
|----|--------|-----------|

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.

PROBLEMS BASED ON LABOUR TURNOVER

22. From the following particulars supplied by the Personnel Department of a company, calculate labour turnover by applying, 1. Separation method, 2. Replacement method and 3. Flux method.

| | |
|---|------|
| Total number of employees at the beginning: | 2010 |
| Total number of employees at the end: | 1990 |
| Number of employees resigned | 30 |
| Number of employees discharged | 50 |
| Number of employees replaced | 40 |

23. From the following data given by the Personnel Department, calculate labour turnover rate by applying:

a) Separation Method, b) Replacement Method, c) Flux Method.

No. of workers on the payroll: At the beginning of the month: 900, At the End of the month 1100 and 150 workers are recruited. Of these, 25 workers are recruited in the vacancies of those leaving, while the rest were engaged for an expansion scheme.

24 Calculate the number of employees in the beginning and at the end of the year from the following:

Labour Turnover rate 3%, Number of separations during the year 15, Number of employees at the end were 100 in excess of the number of employees in the beginning.

25. Calculate the number of Separations during the year from the following information.

| | |
|---|-----|
| Labour Turnover (based on Separations) | 10% |
| Labour Turnover (based on Replacements) | 8% |
| Number of Replacements during the year | 24 |

PROBLEMS BASED ON LABOUR COST

26. 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 to Provident Fund 8% of (a) and (b)
- (d) Employer'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

27 From the following particulars, calculate labour cost for a day of 8 hours.

| | | |
|---|--|---|
| A | Basic wages | Rs.5 per day |
| B | Dearness allowance | 25 paisa for every point over 100 cost of living index, Present cost of living index 800 points |
| C | Leave pay | 5% of A and B |
| D | Employer's contribution to provident Fund | 8% of A and B |
| E | Employers' contribution to state insurance | 5% of A, B and C |
| F | No. of working days in a | 25 days of 8 hours each |

| | |
|-------|--|
| month | |
|-------|--|

28. The following particulars were obtained from the company's book for half year ended 30th June...

| | |
|---|-------|
| Basic Wages | 25200 |
| Dearness allowance | 21600 |
| Overtime allowance | 3500 |
| Provident fund deposited for the period | 5850 |
| Employees state insurance contribution for the period | 1440 |
| Recovery towards house rent | 5100 |

Provident fund is paid for by the employer and employee in equal shares. The ratio of contribution of employer and employee to E.S.I is 7:5. Assuming that all items were evenly spread over six months, calculate the amount of cash required to pay wages and the labour cost of the employer per month.

29 Find out the wages per hour based on the following information.

| | |
|---|---------------------|
| Wages per year | Rs.2400 |
| Annual bonus | 25% of wages |
| Contribution to Provident Fund | 10% on wages |
| E.S.I Contribution | 5% on wages |
| Total leave permitted during the year | 60 days |
| Cost of labour welfare activities including canteen subsidy | Rs.8000 |
| No.of workmen | 200 |
| Normal idle time | 80 hours |
| Working days per annum | 320 days of 8 hours |

How will you treat, if a worker had lost 60 hours on some days on account of failure of power supply?

30. Find out the average labour cost for the employer for a month of 208 hours assuming 8 hours a day from the following:

Average basic wages per hour Rs.6.00

Average dearness allowance per hour Rs.1.00

Number of unpaid holidays in a year 24

Number of unpaid festival holidays in a year 3

Number of days of sick leave with half pay in a year 15

Provident fund 6.5% of basic wages and dearness allowance

State Insurance 1% of basic wages and dearness allowance

Other amenities per month Rs.21.00

PROBLEMS BASED ON OVERTIME

31. Calculate wages due to a worker from the following data.

Normal hours in a week 44

Actual hours worked 50

Rate per hour – Normal Rs.1.25

Overtime 200% of normal rate.

32. Calculate the normal and overtime wages payable to a workman from the following data.

| Days | Hours worked |
|---------|--------------|
| Monday | 8 |
| Tuesday | 10 |

| | |
|-----------|----|
| Wednesday | 9 |
| Thursday | 11 |
| Friday | 11 |
| Saturday | 5 |

Normal working hours 8 per day

Normal wage rate Rs.1 per hour

Overtime rate upto 9 hours in a day at single rate and over 9 hours in a day at double rate

(Or) Upto 48 hours in a week at single rate and over 48 hours at double rate whichever is more beneficial to the workman.

PROBLEMS BASED ON TIME WAGES AND PIECE WAGES

33. The output of the worker A is 60 units in a 40 hours week.

Guaranteed time rate is Rs.5 per hour. Ordinary piece rate is Rs.2 per unit. Show the earnings of worker A under time rate and piece rate system.

34. In a factory, guaranteed wages are paid @ Rs.2 per hour and the payment is made on a weekly basis for a week of 48 hours. By time and motion study it is estimated that manufacture of a product require 25 minutes. To this, personal time and contingency allowance of 20% is to be added. During one week Mr.Das produced 110 articles. Calculate his wages under.

a. Time Rate b. Piece rate with a guaranteed weekly wages.

35. With the help of following information, ascertain the wages paid to workers Ram and Shyam under Taylo's differential piece rate system.

Standard time allowed 40 units per hour

Normal time rate Rs.4 per hour

Differential to be applied:

75% of piece rate when below standard

12% of piece rate when at or above standard

In a day of 8 hours, the workers have produced as follows:

Ram 280 units, Shyam 400 Units.

36. Calculate the earnings of workers A and B under Taylor's differential piece rate system and straight piece rate system form the following particulars:

Normal rate per hour Rs.18

Standard time per unit 20 seconds

Differential to be applied:

80% of piece rate below standard

120% of piece rate at or above standard

Worker A produces 1400 units per day and worker B produces 1500 units per day of 8 hours.

37. Using Taylor's differential piece rate system find out the earning of the worker from the following data.

Standard time per piece 20 minutes.

Normal rate per hour Rs.1.50

In a day of 9 hours, X produces 25 units and Y produces 30 units.

38. A worker is paid at Rs.1.00 per hour for completing a work within 8 hours. If he completes the work within 6 hours, calculate his wages for 6 hours and 8 hours under Halsey Plan when the rate of premium is 50%.

39. Standard time allowed for a job is 20 hours and the rate per hour is Rs.2 plus dearness allowance at 60 paisa per hour worked. The actual time taken by the worker is 15 hours. Calculate the earning under the Halsey plan.

40. Calculate the amount of wages and bonus earned by a worker Suresh.

Job commenced: Monday, 23rd September, 2009 at 8:00 a.m

Job finished: Saturday 28th September, 2009 at 1:00 p.m

Quantity of pieces of work given out: 638

Quantity of pieces of work passed: 600

Worker's rate: 50 paise per hour

Time allowed: 10 pieces per hour

Bonus: 40% of time saved.

Assume that the employee worked for 9 hours a day and no overtime.

In Halsey-weir plan the worker gets a bonus of 30% of time saved against 50% in Halsey plan.

Except for this point, Halsey plan and Halsey weir plan are similar.

41. Calculate the earnings of a worker under Halsey- weir plan.

Time allowed 48 hours

Time taken 40 hours

Rate per hour Rs.10

42. The following particulars apply to a job:

Standard time 10 hours

Time taken 8 Hours

Time rate Rs.2 per hour

Calculate the earnings under Rowan Plan.

43. Calculate the earnings of a worker under the following methods:

a) Time rate b) Piece rate c) Halsey plan and d) Rowan plan

Standard Time: 30 Hours

Time Taken 20 Hours

Hourly rate of wages is Rs.1 per hour plus dearness allowance at 50 paise per hour worked.

44. Set out a comparative statement showing the effect of paying wages under (a) Halsey plan

(b) Rowan plan.

Standard time 10 hours

Wage rate per hour 5 hours

Time taken 8 hours

Overhead rate per hour Rs.6

UNIT IV

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

PROBLEMS BASED ON APPORTIONMENT

45. Mention the bases of apportionment of the following expenses to departments.

| | |
|-------------------------------------|--------------------|
| Rent | Canteen expenses |
| Lighting | Welfare expenses |
| Power | Staff recreation |
| Depreciation of plant and machinery | Stores overheads |
| Insurance of stock | Indirect materials |
| Repairs of plant | Indirect wages |
| Material handling charges | Time-keeping |
| supervision | Municipal taxes |
| Advertising | |

46. Shiva Industries Ltd., has four departments. A, B and C are production departments and D is the service department. The actual expenses for a month were as follows:

| | |
|---|------|
| Rent | 6000 |
| Repairs to plant | 3600 |
| Depreciation | 2700 |
| Lighting charges | 600 |
| Supervision | 9000 |
| Insurance of stock | 3000 |
| Power | 5400 |
| Employees' Insurance – Employer's liability | 900 |

The following information is also available:

| | Department A | Department B | Department C | Department D |
|-----------------------|--------------|--------------|--------------|--------------|
| Area in Sq.ft | 300 | 220 | 180 | 100 |
| No. of Workers | 48 | 32 | 24 | 16 |
| Total Wages | 8000 | 6000 | 4000 | 2000 |
| Value of plant | 24000 | 18000 | 12000 | 6000 |
| Value of Stock | 15000 | 9000 | 6000 | - |

Apportion the costs to four department on the most equitable method.

47. 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 departments assuming that overheads are recovered as a percentage of direct wages.

| Particulars | | Production Department | | | Service Departments | |
|------------------------|------|-----------------------|-------|-------|---------------------|-------|
| | | A | B | C | X | Y |
| Direct wages | Rs. | 7000 | 6000 | 5000 | 1000 | 1000 |
| Direct material | Rs. | 3000 | 2500 | 2000 | 1500 | 1000 |
| No. of workers | | 200 | 150 | 150 | 50 | 50 |
| Electricity | Kwh. | 8000 | 6000 | 6000 | 2000 | 3000 |
| Light points | No. | 10 | 15 | 15 | 5 | 5 |
| Asset Values | Rs. | 50000 | 30000 | 20000 | 10000 | 10000 |

| | | | | | | |
|----------------------|-------|-----|-----|-----|-----|-----|
| Area occupied | Sq.ft | 800 | 600 | 600 | 200 | 200 |
|----------------------|-------|-----|-----|-----|-----|-----|

The expenses during the period were:

| | | | |
|-------------------------|------|--------------------------------|-------|
| Stores overheads | 400 | Depreciation | 6000 |
| Motive power | 1500 | Repairs and maintenance | 1200 |
| Lighting | 200 | General overheads | 10000 |
| Labour welfare | 3000 | Rent and taxes | 600 |

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

PROBLEMS BASED ON ABSORPTION OF OVERHEADS

48. Calculate the 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 Limit 5%
 Factory overheads Rs.1140000
 Gift to workers Rs.7000

PROBLEMS BASED ON COST SHEET

49. From the following particulars prepare cost sheet: Direct materials Rs.8000, Direct Wages Rs.6000, Direct Expenses Rs.2500, Administrative overheads Rs.4000, Factory overheads Rs.5000, Selling and Distribution expenses 2500 and Sales Rs.40000.

50. From the following particulars prepare a statement showing (a) Raw materials consumer (b) Prime cost (c) Works cost (d) cost of Production and (e) Profit.

| | 1.1.2009 | 31.1.2009 |
|----------------------------------|-----------------|------------------|
| Raw materials | 20000 | 32000 |
| Work-in-progress | 26500 | 14000 |
| Purchases of raw materials | | 90000 |
| Carriage inwards | | 2000 |
| Direct wages | | 40000 |
| Chargeable expenses | | 15000 |
| Works overheads | | 22500 |
| Administrative Overheads | | 10000 |
| Selling & Distribution Overheads | | 14000 |
| Sales | | 220000 |

51. Calculate the cost of raw materials purchased from the following data:

| | |
|--------------------------------|--------|
| Opening stock of raw materials | 20000 |
| Closing stock of raw materials | 30000 |
| Expenses on purchases | 10000 |
| Direct wages | 50000 |
| Prime cost | 150000 |

52. A company is manufacturing washing machines and the following details are furnished:

| | | |
|--------------------------------|-----|-----|
| | Rs. | Rs. |
| Work- in progress at beginning | | |

| | | |
|-----------------------------------|-------|--------|
| At prime cost | 51000 | |
| Manufacturing expenses | 15000 | 66000 |
| Work- in progress at the end: | | |
| At prime cost | 45000 | |
| Manufacturing expenses | 9000 | 54000 |
| Stock of raw materials | | 225000 |
| Purchase of raw materials | | 475000 |
| Expenses on purchases | | 2000 |
| Manufacturing expenses | | 84000 |
| Direct labour | | 171000 |
| Stock of raw materials at the end | | 204000 |
| Administrative expenses | | 105000 |
| Selling & distribution expenses | | 35000 |
| sales | | 975000 |

On the basis of the above data, prepare a statement of cost and profit.

53. Calculate Cost of raw materials consumed form the following data.

Opening stock of raw materials Rs.25000

Closing stock of raw materials Rs.32000

Purchase of raw materials Rs.150000

Carriage on purchase Rs.1500

Sale of normal scrap of raw material Rs.4500.

54. Calculate the number of units produced in each of the following cases:

(a) Sales 7000 units, Opening stock 3000 units and Closing stock 2500 units.

(b) Sales Rs.1400000, Opening Stock is valued at Rs.300000 @ Rs.100 per unit. Closing stock is 20% less than the opening stock. Selling price Rs.200 per unit.

55. Prepare a statement showing cost and profit for the year ended 31.12.2017.

| | Rs. | Rs. |
|---------------------------------|----------|------------|
| | 1.1.2017 | 31.12.2017 |
| Raw materials | 100000 | 12,3500 |
| Furnished goods | 71,000 | 42,000 |
| Work-in-progress | 31,000 | 34,000 |
| Purchase of raw materials | | 88,000 |
| Direct wages | | 70,000 |
| Indirect wages | | 2,500 |
| Works expenses | | 37,000 |
| Administrative expenses | | 13,000 |
| Sale of factory scrap | | 2,000 |
| Selling & Distribution expenses | | 15,000 |
| Sale of finished goods | | 275,000 |

56. Prepare a statement of cost giving the following information

a. Prime Cost, b. Works Cost, c. Cost of production, d. Cost of Sales and e. Profit.

| | | | |
|----------------------------------|-------|------------------|------|
| Raw materials consumed | 40000 | Legal expenses | 3600 |
| Indirect materials | 9000 | General expenses | 1250 |
| Wages traceable to jobs | 15000 | Gas & water | 750 |
| Wages paid to maintenance worker | 7500 | Advertising | 4900 |

| | | | |
|--------------------------------|------|--|--------|
| Lubricating oil | 3750 | Packing charges | 2200 |
| Consumable stores | 4250 | Manager's Salary (2/3 rd for factory, 1/3 for office) | 12000 |
| Repairs to plant and machinery | 5100 | Interest received | 1900 |
| Repairs to office building | 1500 | Loss on sale of plant | 4000 |
| Postage and telegram | 1200 | Payment of sales tax | 3100 |
| Audit fees | 2800 | Travelling expenses & Commission | 2500 |
| Director's fees | 6400 | Sales | 150000 |

PROBLEMS BASED ON RECONCILIATION OF COST AND FINANCIAL ACCOUNTS

57. Thenet profit shown by financial accounts of accompany amount to Rs.18000, while the profit as per cost accounts for that period were Rs.28000. On reconciliation, the following differences were noticed.

1. The following items were included in the financial books:

Director's fee (Dr) Rs.650

Bank Interest (Cr.) Rs.120

Income tax (Dr.) 8300

2. Bad and doubtful debts for Rs.570 were written off in financial books.

3. Overhead sin cost accounts absorbed were Rs.8500 while the actuals were Rs.8300

4. Work was started during the year on a new factory and expenditure of rs.16000 was incurred. Depreciation of 5% was provided in financial accounts.

Reconcile the profit between the cost and financial accounts.

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

| | |
|---|--------|
| Net profit as financial records | 128775 |
| Net profit as per costing records | 175400 |
| Works overhead under-recovered in costing | 3100 |
| Administration overhead recovered in excess | 1700 |
| Depreciation in cost accounts | 12500 |
| Depreciation in financial accounts | 11200 |
| Interest on investments not included in costing | 8000 |
| Obsolescence loss charged in financial accounts | 5700 |
| Income tax debited in financial accounts | 40300 |
| Bank interest credited to financial accounts | 750 |
| Stores adjustment credited in financial accounts | 475 |
| Depreciation of stock charged in financial accounts | 6750 |

59. Prepare a statement of Reconciliation form the following:

| | |
|--|-------|
| Net loss as per cost accounts | 34500 |
| Net loss as per financial accounts | 40950 |
| Works overhead under – recovered in costing | 6240 |
| Administrative overhead recovered in excess | 3400 |
| Depreciation recovered in costing | 11200 |
| Depreciation recovered in financial accounts | 12500 |
| Interest on investments no included in costing | 6000 |
| Goodwill written off | 5000 |

| | |
|--|------|
| Provision for doubtful debts in financial accounts | 1260 |
| Stores adjustment credit in financial accounts | 950 |
| Loss of stock charged in financial accounts | 3000 |

60. A Company's trading and Profit and loss account was as follows:

| | | |
|----------------------------|-------|--|
| To purchases | 25200 | By sales (50000 units at Rs.1.50 per Unit) |
| To direct wages | 10500 | By closing stock |
| To works expenses | 12100 | By profit on sale of land |
| To administrative expenses | 5400 | By Discount received |
| To selling expenses | 7000 | |
| To depreciation | 1500 | |
| To Net profit | 20300 | |

UNIT V

Job costing, Contract costing, Process costing (Normal loss, abnormal loss and gains only) – Operating costing.

PROBLEMS BASED ON JOB COSTING

61. The following information is available from the Job ledger in respect of Job No.606.

Materials Rs.3400

Wages 80 hours at Rs.2.50

Variable overheads incurred for all jobs is Rs.6000 for 4000 labour hours. Calculate the profit earned on Job No.606, if it is billed for Rs.4200.

62. Jothi Printers undertook two jobs during the 1st week of June. The following details are available:

| Particulars | Job 501 | Job 601 |
|---------------------------------------|---------|---------|
| | Rs. | Rs. |
| Materials supplied | 40000 | 20000 |
| Wages paid | 9000 | 6000 |
| Direct expenses | 2000 | 1000 |
| Material transfer from job 601 to 501 | 2000 | 2000 |
| Material returned to stores | - | 1000 |

Find the cost of each job and profit or loss if any, assuming that job 601 is completed and invoiced to the customer at Rs.30000.

63. The following direct costs were incurred on Job No 202 of Sekar Industries.

Materials Rs.4300

Wage:

Department A – 60 hours at Rs.3 per hour

Department B – 40 hours at Rs.2 per hour

Department C – 20 hours at Rs.5 per hour

Overhead expenses of these departments were estimated as under. Variable overheads.

Department A – Rs.5000 for 5000 labour hours

Department B – Rs.3000 for 1500 labour hours

Department C – Rs1500 for 500 labour hours

Fixed overheads are estimated at Rs.20000 for 10000 normal working hours.

Calculate the cost of Job No 202 and price to give a profit of 25% on selling price.

PROBLEMS BASED ON CONTRACT COSTING

64. The following were the expenses on a contract which commenced on 1st January 2009.

| | |
|----------------------|-------|
| Materials purchased | 10000 |
| Materials at the end | 1250 |
| Direct wages | 15000 |
| Plant issued | 5000 |
| Direct expenses | 8000 |

The contract price was Rs.150000. It was duly received when the contract was completed on 30th September 2009. Charge indirect expenses at 15% on wages and provide Rs.1000 for depreciation on plant. Prepare the contract account and contractee's account.

65. The following is the record of transactions as on 31st December 2009 relating to a contract completed during the year.

| | |
|-----------------------------------|------|
| Materials purchased | 1500 |
| Materials issued form stores | 500 |
| Wages | 2440 |
| Direct expenses | 300 |
| Works on cost 25% of direct wages | |
| Office on cost 10% of prime cost | |
| Contract price | 6000 |
| Materials returned to stores | 240 |

Prepare contract account

66. The following particulars relate to a certain contract carried out by Lavanya Builders during the year ended 30th June 2009.

| | Rs. | | Rs. |
|--------------------------|--------|----------------------------|------|
| Work certified | 143000 | Establishment charges | 3250 |
| Materials issued | 64500 | Direct expenses | 2600 |
| Labour cost | 54800 | Wages accrued due | 1800 |
| Plant installed | 11300 | Materials closing balance | 1400 |
| Value of plant(Closing) | 8200 | Materials returned to site | 400 |
| Uncertified work | 130000 | | |
| Cash received | 200000 | | |
| Contract price | | | |

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

PROBLEMS BASED ON PROCESS COSTING

67. The following expenses were incurred for the production of 1000 units of durable product.

Materials Rs.350000

Wages Rs.100000

Overheads Rs.50000

You are required to prepare process accounts assuming there was no loss of units.

68. In a factory, the output of a product passed through two process A & B. Prepare process accounts from the following details.

| | A Rs. | B Rs. |
|---------------------|----------|----------|
| Direct Materials | 10000 | 6000 |
| Direct Wages | 4000 | 2000 |
| Chargeable Expenses | 8000 | 4000 |

Overheads amounting to 6000 are to be apportioned on the basis of 100% of direct labour.

69. Product A passes through three distinct process. The product is transferred to finished stock after the third process. Prepare the process accounts from the information given below:

| | Process I | Process II | Process III |
|------------------|-----------|------------|-------------|
| Direct materials | 40000 | 600 | 550 |
| Direct labour | 1500 | 1600 | 900 |
| Direct expenses | 650 | 400 | |

Total production overheads during the period were Rs.6000. It is to be apportioned to different

process on the basis of 150% of direct labour. There was no opening or closing stock. Production during the period was 200 units.

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

| | Process I Rs. | Process II Rs. | Process III Rs. |
|------------------|--------------------------|---------------------------|----------------------------|
| Materials | 10000 | 7000 | 3000 |
| Labour | 2500 | 2000 | 2500 |
| Direct Expenses: | | | |
| Fuel | 500 | 1000 | 500 |
| Carriage | 1500 | 500 | 1000 |
| Works Overheads | 2000 | 2500 | 2000 |

Indirect expenses Rs.14000 should be apportioned on the basis of wages.

71. From the following data, calculate units of normal loss in each process and prepare normal loss account.

| | Process I Units | Process II Units | Process III Units |
|------------------------------------|----------------------------|-----------------------------|------------------------------|
| Input introduced | 1000 | - | - |
| Output transferred to Next process | 900 | 720 | 540 |
| Normal Loss % | 10% | 20% | 30% |
| Value of scrap per unit | Rs.1 | Rs.2 | Rs.3 |

72. Calculate the percentage of normal loss in each of the following cases:

Case A: Input 4000 units, Actual output 3600 units, abnormal loss 200 units.

Case B: Input 4000 units, Actual output 3800 units, Abnormal gain 200 units.

UNIT I

1. Explain the methods of cost accounting?
2. What do you mean by ABC analysis? What are its advantages?
3. Explain the advantages of cost accounting?
4. Define Cost accounting. Discuss the difference between cost accounting and financial accounting.
5. Explain the functional classification of cost.
6. Explain the nature of cost accounting.

UNIT II

7. Calculate EOQ from the following information:

Annual consumption of material 10000 units

Ordering cost Rs.100 per order

Price per unit Rs.5

Carrying cost per annum 20%

8. Prepares stores ledger a/c under simple average method

1.2.07 Balance 100 units @ Rs.5

5.2.07 Purchase 500 units @ Rs.6 each

7.02.07 Issue 300 units

10.02.07 Issue 200 units

9. Prepare stores ledger under FIFO method

| Date | Receipts units | Rate per unit | Issue units |
|------------|----------------|---------------|-------------|
| 4.10.2018 | 300 | 2.40 | |
| 5.10.2018 | - | - | 250 |
| 10.10.2018 | 150 | 2.30 | |
| 12.10.2018 | - | - | 200 |

10. From the following particulars, prepare stores ledger under weighted average method of pricing of material issues.

| January 2010 | Receipts | Issues |
|--------------|-----------------------------|-----------|
| 1 | 300 Units at Rs.10 per unit | |
| 10 | 200 units at Rs.12 per unit | |
| 12 | 400 units at Rs.11 per unit | |
| 15 | | 250 units |
| 16 | | 150 units |
| 18 | 200 units at Rs.14 per unit | |
| 20 | | 300 units |
| 22 | 300 units at Rs.15 per unit | |
| 25 | 100 units at Rs.16 per unit | |
| 27 | | 200 units |
| 31 | | 100 units |

11. Calculate reorder level and maximum level

Reorder quantity 1500 units

Maximum consumption 400 units/week

Minimum Consumption 250 units /week

Reorder period – 4 to 6 weeks

Normal consumption 300 units / week

12. Calculate Reorder level, Minimum Level, Maximum Level, and average stock level.

Normal usage 600 units each per week

Maximum usage 900 units each per week

Minimum usage 300 units each per week.

Reorder quantity X – 4800

Reorder quantity Y – 7200 units

Reorder period X - 4 to 6 weeks,

Reorder period Y - 2 to 4 weeks.

13. Find EOQ from the following:

Annual consumption – 600 units, buying cost per – Rs.12, Unit cost – Rs.20, Storage and handling Charges – 20%

14. Calculate EOQ:

Consumption of material Z – 6250 units p.a

Expenses of placing order - Rs..50 per order

Cost of storing inventory p.a - .10 Per unit.

15. From the following particulars prepare stores ledger for pricing issues under FIFO method.

| | Purchases | Issues |
|-------------|-----------------------------|-----------------------|
| 2010 feb 3 | 500 Units at Rs.12 per unit | 2010 Feb 10 800 Units |
| 2010 feb 6 | 600 Units at Rs.14 per unit | 2010 Feb 14 200 Units |
| 2010 feb 15 | 700 Units at Rs.13 per unit | 2010 feb 25 400 Units |
| 2010 feb 20 | 400 units at Rs.15 per unit | |

The stock on February I was 800 units at Rs.10 per unit. O 18th February stock verification revealed a shortage of 50 units.

16. In a company, weekly minimum and maximum consumption of a material are 25 and 75 units respectively. The reorder quantity fixed by the company is 300 units. The material is received within 4 to 6 weeks from the order date. Calculate minimum level and maximum level of the material.

UNIT III

17. From the following information calculate the labour turnover rate by flux method and replacement method.

Number of worker at the beginning of the year = 3800

Number of workers at the end of the year = 4200

During the year, 40 workers leave while 160 workers are discharged. 600 Workers are required during the year, of these 150 workers' are recruited because of leavers and the rest are engaged in accordance with an expansion scheme.

18. Calculate the earnings of a worker under

Time rate system

Piece wage rate

Halsey plan

Rowan

Wage rate is Rs.2 per hour, Production per hour – 4 units, Actual time taken – 50 hours, Dearness allowance - Rs.1 per hour, Standard time fixed – 80 hours.

19. Prepare a statement showing cost per day of 8 hours.

Monthly salary Rs.400

Leave salary 10% of (i)

Employer's contribution to PF 8% of 1 and 2

Employer's contribution to ESI 5% of I and 2

Expenditure on amenities Rs .18 per head per month

Monthly working hours 200 hours.

20. From the following particulars, calculate labour cost for a day of 8 hours.

| | | |
|---|--|---|
| A | Basic wages | Rs.5 per day |
| B | Dearness allowance | 25 paisa for every point over 100 cost of living index, Present cost of living index 800 points |
| C | Leave pay | 5% of A and B |
| D | Employer's contribution to provident Fund | 8% of A and B |
| E | Employers' contribution to state insurance | 5% of A, B and C |
| F | No.of working days in a month | 25 days of 8 hours each |

21. State the features of Halsey System of wage payment.

22. What do you mean by time booking and its objectives?

23. Calculate the earnings of Workers of A and B under Taylor's differential piece rate system.

Standard time per piece 30 seconds

Normal rate per hour Rs.2.40

80% of piece rate below standard

120% of piece rate at or above standard

Worker A produces 1000 units per day

Worker B produces 900 units per day.

24. Calculate wages under piece rate system from the given details.

Wage rate is Rs.2 per hour. Production per hour is 4 units. D.A. is Rs.1 per hour, Standard time is 80 hours. Actual time is 50 hours. Production is 250 units.

25. Standard time is 10 hours. Number of units to be completed is 5. Hourly rate is Rs.0.25. Time taken is 8 hours. Calculate a worker's earning under rowan plan. Also determine the effective rate of earnings per hour.

UNIT IV

26. Compute machine hour rate. Cost of the machine Rs.25000, scrap value Rs.5000, effective working life of the machine 10000 hours, Repairs for effective working life Rs.5000, power consumption 5 units per hour at Rs.3 per unit, Total hours worked 1000 hours during the year. Standing charges Rs.5000 p.a

27. Calculate Machine Hour Rate

Cost of machine Rs.19200

Estimated scrap value Rs.1200

Average repair and maintenance charges per month Rs.150

Standing charges allocated to machine per month Rs.50

Effective working life of machine 10000 hours

Running time per month 166 hours

Power used by machine 15 units per hour @19 paise per unit.

28. A company has four department L, M and N are production department . K is the service department and its cost is apportioned on the basis of wages. The various expense are :

Rent 21000

Repairs to plant 126000

Depreciation of plant 9450

Light and power 2100

Supervision 31500

Repairs to building 8400

Other Details

| Department | Area | No.of Employees | Wages paid | Value of plant |
|------------|------|-----------------|------------|----------------|
| L | 1500 | 20 | 126000 | 315000 |
| M | 1100 | 55 | 84000 | 189000 |
| N | 900 | 10 | 63000 | 126000 |
| K | 500 | 5 | 42000 | - |

Apportion these cost to production department.

29. Mention the basis for apportioning

Labour Medical Expenses

Factory supervision expenses

Gas and water expenses

Machine Depreciation

Lighting expenses

Advertising expenses

30. Calculate Overhead absorption rates

Labour hour rate

Direct labour cost rate

Machine hour rate

Materials used Rs.36000

Direct labour cost Rs.30000

Hours of machine operations Rs.2000

Factory overhead charged to the department Rs.25000

31. What is cost sheet? What are its objectives?

32. Calculate Prime cost, factory cost, cost of production, cost of sales and profit from the following details.

Direct materials Rs.150000

Direct labour 70000

Direct expenses 5000

Factory expenses 15000

Administrative Expenses 10000

Selling expenses 3500

Sales Rs.275000

33. Ascertain the profit as per financial book form the following information.

Profit as per cost accounts Rs.25000
Closing stock over valued in cost books Rs.12500
Preliminary expenses written off Rs3000
Administrative expenses over recorded in cost books Rs.50375
Works overhead under recovered in cost books 30375
Bank interest transfer fee in financial books 5000
Interest on investment recorded in financial books 10000
Depreciation shown excess in cost books 4000
Provision made for income tax 40000

34. Adhava Ltd., furnishes the following data relating to the manufacture of product X during the month of April 2010.

Prepare Cost sheet.

Raw materials consumed Rs.150000

Direct labour Charges Rs.9000

Machine hours worked 900

Machine hour rate Rs.50

Administrative overheads 20% on works cost

Selling overheads Rs.5.00 per unit

Units produced 17100

Units sold Rs.16000 at Rs.40 per unit.

35. Calculate the overhead allocable to production departments A and B from the following details:

There are 2 service departments X and Y. X renders service to A and B in the ratio of 3:2 and Y renders service to A and B in the ratio of 9:1. Overhead as per primary overhead distribution is : A-Rs.49800, B – 29600, X –Rs.15600, Y – 10800.

The following details are related to the manufacture of torches during the month of March 2009, Prepare a cost sheet showing cost per unit.

Raw materials consumed Rs.20000

Direct wages Rs.12000

Machine hours worked – 9500 hours.

Machine hour rate Rs.2

Office overheads – 20% of works cost

Selling overheads - 50 paise per unit

Units produced 20000 units

Units sold 18000 units @ Rs.5 per unit.

Calculate the value of raw materials consumed:

Raw materials purchased 12000, Opening stock 2000, Closing stock 35000.

UNIT V

36. Following information is taken from Job No.303

Materials Rs.4010

Wages: Department A - 60 hours @ Rs.3 per hour

Wages: Department B- 40 hours @Rs.2 per hour

Wages: Department C – 20 hours @ Rs.5 per hour

Variable overheads:

Dep A – Rs.5000 for 5000 hours

Dep B –Rs.3000 for 1500 hours

Dep C Rs.2000 for 500 hours
Fixed expenses Rs.20000 for 10000 working hours
Profit: 25% on selling price
Calculate the cost and selling price of Job No.303

37. In process A 100 units of raw materials were introduced at a cost of Rs.1000. The order expenditure incurred by the process was Rs.600. The order expenditure incurred by the process was Rs.600. Of the units introduced 10% are normally lost in the course of manufacture and they possess a scrap value of Rs.7 each. The output of process A was only 75 units. Prepare process "A" a/c and abnormal loss a/c.

38. Prepare contract account:

Material bought from market 1500
Material issued from stores 500
Material returned to stores 240
Wages 2440
Direct expenses 294
Works on cost 25% direct wages
Office on cost 10% of prime cost
Contract price Rs.6000

39. Prepare contract account:

Materials purchased 10000
Direct wages 15000
Direct expenses 8000
Materials at the end 1250
Plant issued 5000

The contract price was Rs.150000. Contract was completed on 30th September 1998. Charge indirect expense at 15% on wages and provide Rs.1000 for depreciation on plant.

40. From the following particulars prepare contract account.

Materials 40000
Wages 50000
Other expenses 15000
Machinery at cost 5000
Work Certified 120000
Work Uncertified 60000
Material on hand (on 31st December) 11000
Machinery value at close 43000
Cash received from contractee 100000
Materials returned to store 2000
Contract price 350000

41. Prepare Job no.888 cost.

Raw material Rs.3400
Wages 80 hours at Rs. 2.50
Variable overhead incurred for all jobs Rs.5000 for 4000 labour hours.

42. Prepare contract account 123.

Contract price 600000, General expenses 8600, Plant 20000

Work certified at 80%, Depreciate plant 10%, wages 164000, raw material 120000, cash received 240000, Material at site 10000.

43. A product passes through three process X, Y, and Z to completion. Prepare process Y account and abnormal loss account.

Received from process X 950 units – 9500

Direct wages 3000

Scrap sold per unit Rs.4 (Number of units produced 840)

Raw material 1980

Normal loss 10%,

General expenses 100% of direct wages.

44. Find the total cost for Job No.101, Assume 25% profit on sales. Raw material Rs.4010

| Wages | Overheads |
|------------------------------------|---------------------------------------|
| Dept., A 60 hours at Rs.3 per hour | Dept. A Rs.5000 for 5000 labour hour |
| Dept. B 40 hours at Rs.2 per hour | Dept. B Rs.3000 for 15000 labour hour |
| Dept. C 20 hours at Rs.5 per hour | Dept. C Rs.2000 for 500 labour hour. |

45. R Ltd., took up two jobs during the 1st week of april 2010, details are:

| | Job 108 Rs. | Job 109 Rs. |
|------------------------------------|-------------|-------------|
| Materials supplied | 21000 | 14000 |
| Wages paid | 9000 | 6000 |
| Materials transfer from 109 to 108 | 1000 | 1000 |
| Materials returned to stores | | 500 |

Find out cost of each job.

46. Calculate the cost of each process and total cost of production from the data given below:

| | Process I | Process II |
|-----------------|-----------|------------|
| Material | 2250 | 750 |
| Wages | 1200 | 3000 |
| Direct Expenses | 500 | 500 |
| Works overhead | 1890 | 2580 |

Other indirect expenses of Rs.1275 should be apportioned on the basis of wages.

47. From the following information, calculate

Effective kilometers p.a

Effective passenger kilometers p.a

Total fuel consumption

Total cost of fuel

Cost of fuel per kilometer

Distance of one way route 60 kilometers

Round trips per day 4

Days operated in a month 25

Seating capacity 40 passengers

Seating capacity occupied 75%

Fuel consumption 1 liter per 5 kms

Rate of fuel Rs.40 per liter.

48. The Information given below has been taken from the cost records of a factory in respect of a Job:

Direct material Rs.4010

Wage details.

Department A 60 hours @ Rs.3 per hour.

Department B; 40 hours @ Rs.2 per hour.

Department C: 20 hours @ Rs.5 per hour.

Variable overheads:

Department A Rs.5000 for 5000 hours.

Department B: Rs.3000 for 1500 hours

Department C: Rs.2000 for 500 hours.

Fixed expenses are estimated at Rs.20000 for 10000 working hours. Calculate the cost of the job and the price for the Job to give a profit of 25% on the selling price.

49. A product passes through three distinct process A, B and C to completion. During the week ended 15-01-2018, 500 units are produced. The following information is obtained.

| Particulars | Process A (Rs.) | Process B (Rs.) | Process (Rs.) |
|------------------|-----------------|-----------------|---------------|
| Direct materials | 3500 | 1600 | 1500 |
| Direct labour | 2500 | 2000 | 2500 |

The overheads expenses for the period were Rs.1400 apportioned to the processes on the basis of wages. No work in progress or process stocks existed at the beginning or at the end of the week. Prepare process accounts.
