

CHAPTER: 9

ACCOUNTING FOR MATERIALS

Theory que:

1 very short question for 1 mark

1 short question for 2 marks

Numerical que:

2 numerical que.: $1+3 = 4$ marks

Meaning of Material

- Materials are the commodities or articles used for processing in the factory to manufacture goods or rendering services.
- Physical commodities used to manufacture the final product.
- Materials are components, consumables stores, maintenance materials, cleaning materials, spare parts, & tools etc.
- Direct materials and indirect materials are two types of materials.

Meaning of Material Control

- Cost accounting focuses with the first priority to the effective material control system
- Any amount of cost reduction of materials or saving in materials cost will directly increase profit to the firm.
- Includes quality and quantity controls and cost controls.
- The act of purchasing the materials as per requirement at lower cost, keeping proper & accurate record, proper use & handling, proper storage, supply as per order, controlling excessive use and unnecessary use of materials.

Contd....

- A system developed for proper materials purchasing, storing and consumption at minimum cost to control the misuse and misappropriation of materials and to minimize the corruption and irregularities.
- A system which ensures that purchasing of right quantity & quality materials at right place at the right time with right amount of investment.

Objectives of Materials Control

a) To supply of materials regularly

The main objective to supply the materials with regular flow of for production without any interruption by determining the stock level and placing an order for desired quantity and supplying as per requisition form received from departments or sections.

b) To purchase the materials at reasonable price

Another objective is to purchase the materials competitively at a most reasonable price. Materials should be purchased at the lowest price but not at the cost of quality otherwise it increases the cost of product.

c) To minimize the expenses

- Due to right quantity of materials purchase at right time at a right place certainly decreases transportation cost & loading–unloading cost & time and time of materials collection from the market.
- So, materials control aims to minimize these costs incurred & associated with materials purchase.

d) To provide the information to management

Management needs information related to materials for strengthening material control, timely purchase of supplies, mode of delivery, for formulating the future policies of the firm regarding materials.

Contd.....

e) To supply of finished product regularly

- It is essential to supply its products regularly to the market without any scarcity otherwise customers may shift to materials of another supplier.
- In the long run, they will continue to buy substitute materials. Ultimately it affects the goodwill of the firm.

f) To increase the profit

- A well-managed inventory control system supports to regular production without any shortage and difficulties in flow of materials for the production.
- Ultimately it shows positive on profit or increase in profit.

Contd.....

g) To prevent the excessive use, wastage and misappropriation of materials.

Materials control is essential to keep the materials in the store with low possibility of loss on materials, to handle the materials in a scientific way, to avoid the wastage, leakage for the minimization of cost of production.

h) To prevent the excessive investment in materials.

Materials control is essential to know the right quality and quantity of materials purchase at reasonable price so that high investment on materials can be reduced by proper knowledge of stocking.

Store Scheduling or Routing

Store scheduling is the process of preparing routine and schedule of material purchasing, storing and material supply and their proper records.

Material scheduling or routing is a scientific system of material controlling, which includes:

1. Materials purchase
2. Storekeeping and
3. Issuing materials.

1. Materials Purchasing

Materials purchasing is the process of acquiring materials of right quality at right quantity at right time from right places and supplier with reasonable price by purchasing department.

Materials purchasing procedures

1. Receiving purchase requisition
2. Receiving quotation
3. Selection of supplier
4. Placing order
5. Receiving and inspecting goods
6. Verifying and passing bills for payments

Prepare the different forms in note copy from the book.

Materials Purchasing system

Types of Purchasing System

a) Centralized purchasing system

b) Decentralized purchasing system

a) Centralized purchasing

- Under centralized purchasing system, a separate purchasing department is set up to buy and to supply all the materials required for different department of the organization.
- Under this system, purchasing manager is appointed and responsible to buy & supply the required materials for all departments by receiving the order.
- All the materials required for the organization are purchased through this department only and distributed to other departments.

Merits of centralized purchasing system

- Better trade discount and low carriage cost on bulky materials purchase.
- Effective and proper record keeping system can be developed due to all purchases through a place.
- Easy to make the payment and deal with vendor by one purchase officer only instead of many.

Demerits of centralized purchasing system

- There is a chance of unnecessary purchase due to misunderstanding between purchasing and other departments.
- Ignoring local purchase and use.
- There is a chance of wrong quality materials purchase.

b) Decentralized purchasing system

- Under decentralized purchasing system, a separate purchasing department is not set up in the organization.
- Every department is authorized and autonomous
- Each department can purchase the required quantity of materials independently.
- Every branch has a separate and small unit for material purchase.

Merits of decentralized purchasing system

- Local materials can be purchased when required.
- Right quantity with right quality of materials can be purchased independently.
- Avoids unnecessary cost of setting up a combined purchasing department for all.
- Avoids high transportation cost for the materials distribution.

Demerits of decentralized purchasing system

- Under this system, numbers of orders should be placed for less quantity of materials. So, there is less discount facility & frequent purchase has high transportation costs for small quantity purchase.
- The firm cannot afford high operation costs for every department. So, it does not use the specialized knowledge and skill of staffs for material purchase, handling, storing and supplying.
- Several persons are engaged in purchasing, there may be high chance of irregularities. So it is impossible for material control.
- Chance of unnecessary blocking of scarce resource due to overstocking of unused materials & investment on such materials.

2. Store Keeping

- Store keeping is the process of arranging & storing the materials received in stores.
- So, organized & systematic storing is one basic requirement of material control that prevents losses from misappropriation, damage, theft, evaporation, or obsolescence of store items.

Objectives

- To collect necessary materials in a systematic way by preventing undesirable purchase.
- To help the regular function of the department i.e. supervision and management of flows of materials.
- To keep the materials in their appropriate location with proper classification, codification and identification.
- To inform the concerned department regularly about the stock position.

Store keeper

Store keeper is a person appointed in the store who is responsible to purchase, supply, keep proper record, handle, classify, codify the materials, provide security, avoid the loss or damage on materials stored etc.

Powers, Duties and Responsibilities of Store keeper

- To purchase and receive the materials at right quantity with supported documents.
- To enter the items received in the bin card regularly & chronological.
- To prevent and minimize the loss of materials by theft and leakage.
- To prohibit the entry of unauthorized persons into the stores.
- To update records of the materials received and issued and their balances.

Stores

- Store is place of the company, which receives the materials and distributes to the departments/ branches or sections for the production.

Types of stores

- a. Centralized store
- b. Decentralized store
- c. Centralized with sub-store

Stores

a. Centralized store

- A store of the company, which receives the materials for all departments and issues/distributes these materials to all departments/ branches or sections.
- Centralized store purchases required materials for all departments and stored at a particular place and issues the required materials as per the demand of all departments itself only.

Contd....

Merits

- Less cost of purchase.
- Better supervision of stores is possible.
- Less space is occupied.
- Trained and specialized staff can be appointed.
- Less chance of materials wastage.
- Less transportation cost.
- Economical for storing materials.

Contd.....

Demerits

- Delay in distributing materials.
- High transportation cost for distribution .
- High chance of loss from materials destroyed by accident/fire.
- Unsuitable to large organization.
- Increase in materials handling cost.

b. Decentralized store

- A store which receives materials for own department only and issues the materials to only one department but not to all departments of the company.
- Such stores are established in all the departments.
- All stores are independent to buy the required quantity of materials to the particular department only and not responsible for others.
- Decentralized stores are separately established in each department.

Merits

- Easy in controlling and storing because of keeping small quantity of materials.
- Quick in materials handling.
- Chances of less amount of loss on materials by fire in individual store.
- Less transportation cost on distribution inside the organization.
- Less materials handling cost

Demerits

- High supervision cost
- Requirement of more store space for all departments.
- Essential of more time for stock taking, verifying and checking.
- High administrative cost on staff, rent and stationery.
- Impossible to install automated machine and new technique to control.

c. Centralized stores with sub-stores

- Under this system, sub-stores are established in different departments according to requirement when the central store is at a distance from the production.
- Sub-stores are managed, controlled and handled by central store itself.
- Central store issues a fixed quantity of materials to sub-stores at the beginning of a period.
- Sub-stores send requisition form to central store to make stock balance with pre-determined level at the end of period.

Merits

- Solving the problems of centralized store.
- Possible for quick supply of materials.
- Quick services to each department.
- Reducing transportation cost of centralized store in distribution.
- Less loss on materials in case of accident inside a department.

Demerits

- High cost for stationery, staff and rent.
- High materials handling cost.
- Additional set up and lay out cost in each department.
- Complicated store control.
- Time consuming for stock taking, verifying and checking.

Store-Keeping Procedures:

After receiving the materials from the vendor transport company, the receiving or purchasing department prepares the receiving note, and hands over the materials along with copies of the receiving note to the storekeeper.

Upon receipt of the materials, the store staff perform the following:

- a. Classification and codification of materials
- b. Recording of materials received
- c. Storing the materials
- d. Issuing of materials

Classification and Codification of Materials

- Different types of materials are collected in the stores. They all are intended for meeting the demand of different departments.
- Instead of keeping the materials dumped, like garbage, they are stored systematically.
- Classification and codification of materials are good steps and technique of materials control to maintain the store in a systematic way.
- Materials are classified for storing, issuing and identifying in easy.
- Materials are generally classified according to their nature. Classification plays a very effective and positive role in the control and management of stores.

Contd.....

a. Classification of materials:

- Classification makes it easy to locate the items immediately where the materials are kept.
- Act of separating and categorizing the materials into different groups in terms of sizes, brand, natures or types or qualities or quantity etc.

b. Codification of materials:

- After classification, different materials groups are codified by assigning numbers.
- Codification is the procedure for assigning symbols or codes or numbers for each item of materials with proper arrangement to facilitate storing.
- Materials can be codified by providing alphabetic or numeric or alpha-numeric symbols and codes.

c. Storing and issuing the materials

- Materials are stored in the proper order and conditions of materials so that they can be found whenever required.
- Keeping the records of materials is the second and very important function of store staff before issuing materials to different departments.
- Modern management uses two types of forms/books to keep the record of receipts and issuance of materials:
 - i) Bin card
 - ii) Store ledger

Bin card

- Each shelf, rack or container for storing materials is called bin.
- A card which is attached with each bin to keep the records of movement of concerned item is called bin card.
- Any item of materials received from the receiving department is first recorded in the concerned bin card. Bin cards are generally divided into three parts, they are:
 - (a) receipts (b) issues and (c) balance

Store ledger

- Stores ledger is another important book, which is used to maintain proper record of materials movement such received in the stores, supply from the store.
- Store ledger is a store book (or stock book), which is prepared to keep the record of materials purchase & their issue and to show the balance in stock.

3. Pricing the materials issue

Pricing of Materials Issued

- In the determination of price for a product or job, the price of materials issued is of prime importance.
- The price of a product cannot be determined without knowing the value of material. There are different methods for pricing the materials issued.
 - A. First-in first-out method.
 - B. Last-in first-out method.
 - C. Average cost method.
 - a. Simple average cost method
 - b. Weighted average cost method

Inventory System

Inventory system

- **Storekeeper issues the materials to the production departments as per the requisition form received.**
- **At the end of the period, the stock on hand is valued.**
- **The following are the systems used for the valuation of inventory at the end of the period:**
 - a. Perpetual inventory system**
 - b. Periodic inventory system**

A. Perpetual inventory system

- Perpetual inventory system is a technique of controlling stock items by maintaining store records in a manner such that stock balances at any point of time are readily available.
- The terms “perpetual inventory” refer to the system of record-keeping and a continuous physical verification of the stocks, with reference to store-records.
- **The following are the methods of pricing the issue of materials and inventory valuation under perpetual inventory system:**
 - a. First-in first-out method.
 - b. Last-in first-out method.
 - c. Average cost method
 - i. Simple average cost method.
 - ii. Weighted average cost method

B. Periodic inventory system

- A periodic inventory system is a form of inventory valuation where the inventory account is updated at the end of a specific period rather than after every purchase and sale.
- Under this system, the physical counting and verification of inventory is made at the end of specific period such as month end or quarter end or year end.
- At the end of the period, the value of the stock is determined under different inventory valuation methods.
- **The following are the methods of pricing the issue of materials and inventory valuation under perpetual inventory system:**
 - a. First-in first-out method.
 - b. Last-in first-out method.
 - c. Weighted average cost method.

Accounting for inventory valuation under periodic inventory system

Under this system, the following steps are to be followed for the valuation of ending inventory:

Step 1: Calculation of the cost of goods available for sale:

Cost of goods available for sale (CGAS) = Beginning inventory + Purchases cost

Step 2: Calculation of the cost of goods sold (COGS):

Cost of goods sold = Sales units x Cost price per unit

Step 3: Calculation of the value of ending inventory:

Value of ending inventory = Cost of goods available for sale – Cost of goods sold