Fundamentals of

Fundamentals of Inventory Management

Learning Objectives

- Meaning of inventory
- Understanding of inventory management
- Terms used in inventory management
- Understanding of different types of inventory valuation

4.1 Introduction

Inventory is an asset that is intended to be sold or consumed to produce finished products in the ordinary course of business. Inventory may not be immediately ready for sale.

In accounting, inventory is typically broken down into three stages, which are:

- **Raw materials**: Includes materials intended to be consumed for the production of finished goods.
- **Work-in-process:** Includes items that are in the midst of the production process, and which are not yet in a state ready for sale to customers.
- **Finished goods:** Includes goods ready for sale to customers. May be termed merchandise in a retail environment where items are bought from suppliers in a state ready for sale.

4.2 Inventory Management

Inventory Management is the process of keeping the track of goods from manufacturing till it reaches point of sale and also it involves keeping track of new and returned from entering to exist. Hence inventory management is very crucial process for a business.

4.3 Terms Used in Inventory Management

Following are the few terms used in inventory management.

Stock Item: It is the physical stock that is kept in the godown or store for sale and it can be measured in quantity. When we purchase stock item the quantity of stock item increases and while making sale quantity of stock item decreases.

Godown: It is the place/location/warehouse/rack where the stock items or goods are stored.

SKU: SKU stands for Stock Keeping Units, it is the unique code assigned to a product or services for its identification. This code varies from organisation to organisation.

Safety Stock: It is also called as buffer stock, it is the stock that is kept by business in order to avoid the shortfall of goods/stock, in case of uncertainty in manufacturing or supply or demand. This also avoids the risk of running out of stock.

Reorder Level: It is the inventory level at which the company has to place an order for the stock item. The importance of a reorder level arises from the need to have sufficient stocks to service customer orders and at the same time not to have unnecessarily high stocks.

Price List: It is a list of items maintained by an organisation along with their price details. It is generally used by organisations which deal in multiple products.

Price Lists are maintained in various structures for different types of buyers (customers), viz., Wholesalers, Dealers, Retailers, etc. It is structured based on the classification of buyers and is referred to at the time of making sales.

Manufacture & Expiry Date: Manufacture date is the date on which the goods are produced. Expiry date is the date on which the goods are expired, this mean that goods are not in a good condition to be consumed. Manufacture & Expiry dates will be available in perishable goods like food, medicines etc.

Dead Stock: It is a stock which is not sold and lying in godown from long time.

4.4 Inventory Valuation

Important goal of accounting for inventory is to have accurate information about costs and

sales. Stock valuation allows a company to provide a monetary value for stock items lying in their inventory. This information allows a company to properly evaluate expenses and revenues on their financial statements so that they can make correct business decisions.

Stock Valuation Methods

The choice of stock valuation methods depends on a number of variables, like the business situation and financial goals of the business organisation.

The cost of goods sold is largely based on the cost assigned to closing stock (Ending inventory).

Cost of goods sold = Opening stock (Beginning Inventory) + Purchases made during the reporting period – Closing Stock (Ending Inventory)

Note: *Similarly, Gross Profit = Net sales – Cost of goods sold*

There are different types of stock valuation methods available for calculating the recorded value of closing stock (ending inventory).

4.4.1 Different Types of Inventory Valuation

Following are the different types of inventory valuation used by many businesses based on their situation and financial goals of the business.

There are different types of stock valuation methods that can be used for accurate stock valuations based on the nature of business.

Different types of stock valuation methods are given below:

1. Average Cost Method
2. FIFO (First in, First out)
3. FIFO Perpetual
4. LIFO Annual (Last-in, First-Out)
5. LIFO Perpetual
6. HIFO (Highest In, First Out)
7. Last Purchase Cost
8. Standard Cost

Let us check in detail explanation of different stock valuation methods.

1. **Average Cost Method:** It is also called as weighted average cost method, in this method the stock is valued based on the formula given below:
   Average Cost = Total Inward Value for the year/ Total Inward Quantity for the year

   In case of **Monthly Average Cost Method**, the weighted average cost is determined on a monthly basis instead of annual

2. **FIFO (First In First Out):** Under FIFO Periodic System, it is assumed that items purchased first are sold first under the current financial year (i.e., first lot from the opening stock of current year).
   In case of **Perpetual FIFO Method**, it is assumed that items purchased first are sold first

across the financial year (i.e., first lot may be from previous year entry).

Hence cost of goods sold is based upon the cost of material received first in the period, while the cost of inventory is based upon the cost of material received last in the period. This method is adopted by the business, when the cost of the items are decreasing (deflation) and this will result in lower taxable income.

3. **LIFO (Last In First Out):** Under LIFO Periodic System, it is assumed that items purchased last are sold first under the current financial year (i.e., first lot from the opening stock of current year)

In case of Perpetual LIFO Method, it is assumed that items purchased last are sold first across the financial year (i.e., first lot may be from previous year entry).

Hence cost of goods sold is based upon the cost of materials received last in the period, while the cost of inventory is based upon the cost of material received first in the period. This method is adopted by the business when the cost of the items are increasing (Inflation) and this will result in lower taxable income.

4. **HIFO (Highest In First Out):** Under HIFO, the items purchased with the highest cost is sold first or removed first. This method is followed by the company who wants to decrease the taxable income for a period of time.

5. **Last Purchase Cost:** Last purchase cost is Last purchase rate. Cost of goods sold and Cost of inventory is based upon the Last purchase rate.

6. **Standard Cost:** In this method a standard cost is fixed for all the goods available within the business. This method is used when it becomes hectic and time consuming to collect actual costs of goods, hence standard costs are used and this cost will be approximately close to actual cost.

Note: *FIFO is not restricted by GAAP (Generally Accepted Accounting Principles) & IFRS International Financial Reporting Standards) but LIFO is restricted by IFRS (accounting standards. In many countries IFRS is followed for accounting.*

4.5 Inventory Management in Tally.ERP 9

In Tally.ERP 9, we can manage inventory system with ease, we can keep a track of movement of stock item from manufacturing house till it reach to point of sale. Few inventory features of Tally.ERP 9 are given below:

1. **Inventory Masters**: In order to record the inventory related transactions in Tally.ERP 9, we need to create the inventory masters. The different types of inventory masters are given below:

- **Stock Group:** It is a group where stock items with same nature/characteristics are grouped under one head called as stock group. **For example** Television is a stock group and under this group we can add stock items like LG Television, Videocon Television, and Philip Television etc. here the brand are different but characteristic

(i.e. Television) is same. So in this case we can create a stock group by name Television.

- **Stock Item:** It is the inventory of the business which are manufactured or traded. It is the primary inventory entity and is the lowest level of information on your inventory. In Tally.ERP 9, one must create the inventory in order to keep the track of the same. For example we create stock items like LG Television, Videocon Television etc.

- **Units of Measure:** Stock items are measured in units, in Tally.ERP 9, we can create simple units like Nos, Kg, Pcs etc. and compound units like Box of 12 Nos, Doz of 12 Nos etc.

- **Godown:** It is the location where stock items/goods are stored, few example of godowns are storehouse, warehouse and rack etc.,

2. **Batch Wise Details:** Batch details are used to identify the movement of inventory in batches or lots. Although this is a requirement primarily of the pharmaceutical industry, the same can be used by other industries that maintain or manufacture perishable goods. We can define the manufacturing and expiry dates for stock item along with batch details.

3. **Price List & Levels:** A Price List refers to a list of items maintained by an organisation along with their price details. It is generally used by organisations which deal in multiple products. Price Lists are maintained in various structures for different types of buyers (customers), viz., Wholesalers, Dealers, Retailers, etc. It is structured based on the classification of buyers and is referred to at the time of making sales. Tally.ERP 9 permits you to create any number of price lists & price levels, based on the Stock Group and Stock Category to match the required structure.

4. **Point of Sales (POS):** Point of Sale or POS can be a retail outlet, a checkout counter in a shop, or any other location where a sale transaction takes place. POS system is a computerised cash register which adds up the sales totals, calculates the balance to be returned to the buyer and automatically adjusts the inventory levels to reflect the quantity sold. The equipment required for POS to work effectively are cash registers, card readers, bar-code scanners etc.

5. **Tracking of Item wise cost Details:** In Tally.ERP 9, we can effectively track and ascertain the procurement cost, landing costs, manufacturing or production cost, order cost/profit and job cost/profit. This feature is also useful in determining the sales price of finished goods based on the costs incurred till date and the overall profitability.

6. **Order Processing:** In Tally.ERP 9, we can keep the track of purchase order processing and sales order processing. We can maintain the details of inventory which are rejected or

returned. It also gives us the facility to cancel the unwanted or rejected orders & check the outstanding reports.

7. **Job order processing:** In Tally.ERP 9, we can maintain the details of work which is

outsourced. We can keep the track of inventory which is sent out, inventory which is received and inventory which is yet to be received.

8. **Stock Categories:** In Tally.ERP 9, we can give a parallel allocation to the stock item by maintaining stock category details **for example** if we create stock group as Television, then parallel grouping in inch (21 inch, 22 inch) can be given to Television. This will lead us to generate different inventory reports like availability of total Television, availability of total 21 inch television.

9. **Costing Methods:** The choice of stock valuation methods depends on a number of variables, like the business situation and financial goals of the business organisation. In Tally.ERP 9, one can explore the following costing method for stock valuation as per business requirement.
   - At Zero Cost
   - Average Cost
   - FIFO
   - FIFO Perpetual
   - Last Purchase Cost
   - LIFO Annual
   - LIFO Perpetual
   - Monthly Average Cost
   - Standard Cost

10. **Bill of Materials (BoM):** Automatic listing of components while manufacturing a finished product is possible through Bill of Materials feature provided in Tally.ERP 9. Apart from auto listing, we can add the manufacturing cost like labour change, packing charge etc., to finished goods.
    Apart from BoM, we can also maintain or record the complete manufacturing process details using manufacturing journal voucher. While recording manufacturing process entry we can keep the track of by-products and co-products along with scrap details.

11. **Inventory Vouchers:** We come across different inventory transactions in our day to day business activities like purchase of raw materials, manufacturing of goods, sale of goods, rejection of goods, transfer of goods etc. All these transactions can be recorded in predefined inventory vouchers available in Tally.ERP 9.

12. **Inventory Reports:** In Tally.ERP 9, we can instantly generate inventory reports like stock summary, physical stock register, transfer analysis, ageing analysis, stock query, batch wise details etc., with ease. Once the inventory related transactions are recorded in Tally.ERP 9, the reports will get updated instantly.

Note: *We have the flexibility to maintain our books of accounts with* **Accounts with Inventory details** *as well as* **Accounts** *only details in Tally.ERP 9.*

Conclusion

In this chapter, we have learnt the importance of setting inventory mechanism for any organisation,

understood the different types of inventory valuation and learnt about different inventory features like inventory master, batch wise details, price level and price list and bill of materials etc., which helps in setting strong inventory foothold in an organisation.