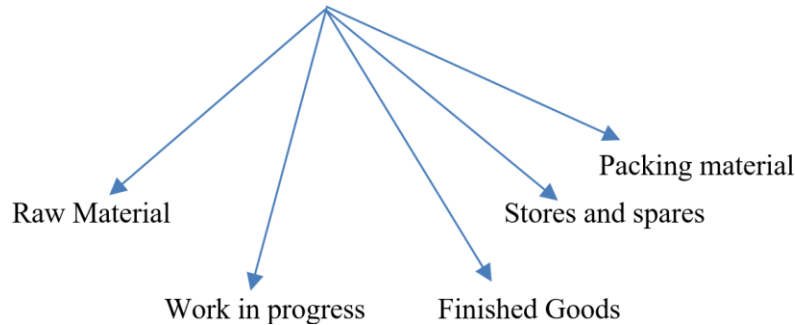


CHAPTER-11 INVENTORY

Type of Inventory

i) In case of Manufacturing concerns



ii) In case of Trading concerns



Traded Goods

1. MEANING

Inventory can be defined as assets held for various purposes within a business entity. It encompasses items

- i) that are intended for sale in the normal course of business,
- ii) those in the process of production for sale, and
- iii) those utilized in the production of goods or services for sale, including maintenance supplies and consumables (excluding machinery spares, servicing equipment, and standby equipment).

Different types of inventory exist based on the nature of the enterprise's operations. For a trading concern, inventory primarily comprises products acquired for resale in their current state. Additionally, it may include supplies like wrapping paper, cartons, and stationery. In the case of a manufacturing concern, inventory consists of several categories: raw materials (which will be transformed into finished goods), work-in-progress (partially completed products in the factory), and finished products. Manufacturing concerns also include maintenance supplies, consumables, loose tools, and spare parts within their inventory. However, inventory does not encompass spare parts, servicing equipment, and standby equipment that are exclusively used with fixed assets and are expected to have irregular usage. Such machinery spares are typically treated as fixed assets. Similarly, construction businesses consider projects under construction as part of their inventory.

At the end of the fiscal year, every business entity must determine the closing balance of its inventory, which includes raw materials, work-in-progress, finished goods, and other consumable items. The value of the closing inventory is recorded on the credit side of the Trading Account and the asset side of the Balance Sheet. Therefore, before preparing the final accounts, the accountant needs to ascertain the value of the inventory. However, for the purpose of our discussion, we will focus on the inventory valuation of manufacturing concerns and goods of trading concerns.

2. INVENTORY VALUATION

An important aspect of accounting for inventories revolves around determining their appropriate valuation for inclusion in the financial statements until the corresponding revenues are recognized. Inventories typically represent the largest portion of current assets held by trading or manufacturing enterprises. It is widely acknowledged that inventory is a crucial asset that directly impacts operational efficiency. Both excessive inventory levels and inventory shortages can have adverse effects on production activities and the overall profitability of a business, regardless of whether it is engaged in manufacturing or trading operations. Therefore, accurately valuing inventory is essential for ensuring the reliability and accuracy of the financial statements. The importance of inventory valuation can be attributed to several reasons, as outlined below:

i) **Determination of Income:**

Inventory valuation is crucial for accurately calculating the income earned by a business during a specific period. The cost of goods sold is matched with the revenue to determine the gross profit. The formula for calculating the cost of goods sold is as follows:

Cost of goods sold = Opening inventory + Purchases + Direct expenses - Closing inventory.

The valuation of inventory significantly impacts income determination, especially when the cost of goods sold represents a substantial portion of the sales price. Misstatements in inventory valuation can affect net income:

Overstating closing inventory results in overstated net income.

Overstating opening inventory leads to understated net income.

Understating closing inventory results in understated net income.

Understating opening inventory leads to overstated net income.

Thus, accurate valuation of inventory is essential for determining the correct income.

ii) **Ascertainment of Financial Position:**

Inventories are classified as current assets, and their value on the balance sheet date is crucial for determining the financial position of a business. Proper valuation of inventory ensures that the balance sheet reflects the true financial position of the business.

iii) **Liquidity Analysis:**

As inventory is classified as a current asset, it is a component of net working capital, which provides insights into the liquidity position of the business. The value of inventory significantly affects the current ratio, which measures the relationship between current assets and current liabilities.

iv) **Statutory Compliance:**

Under Schedule III of the Companies Act, 2013, the valuation of each class of goods, including raw materials, work-in-progress, and finished goods, must be disclosed in the financial statements. Accounting standards also require the disclosure of the accounting policies used for measuring inventories and the total carrying amount of inventories, along with appropriate classification based on the enterprise's requirements.

The common classifications of inventories include raw materials, work-in-progress, finished goods, stores-in-trade (for trading goods), and spares and loose tools.

3. BASIS OF INVENTORY VALUATION

The valuation of inventories is guided by the principle of conservative accounting, which states that expenses or losses should be recognized immediately while gains or profits should only be recognized when they become due or realized. The general rule is to value inventories at the lower of cost or net realizable value, considering the following principles:

Cost:

According to accounting standards, the cost of inventories should include:

- i) All purchase costs, such as the purchase price, duties, taxes (excluding those recoverable from taxing authorities), and directly attributable acquisition expenses. Trade discounts, rebates, and duty drawbacks are deducted from the purchase cost.
- ii) Costs of conversion, primarily for finished goods and work-in-progress. This includes direct labor costs and a systematic allocation of fixed and variable overheads.
- iii) Other costs incurred in bringing the inventories to their present location and condition, such as administrative overheads or specific costs related to a customer's inventory.

Certain expenses are excluded from the cost of inventories, including abnormal amounts of wasted materials, labor, or production overheads, storage costs (unless necessary in the production process), administrative overheads unrelated to bringing the inventories to their present state, and selling and distribution costs.

Net Realizable Value:

Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the costs necessary to make the sale. For finished goods and traded goods, net realizable value typically considers selling price minus selling and distribution expenses. In the case of work-in-progress, it also includes expenses and overheads required to convert it into finished goods ready for sale. For raw materials, the net realizable value is generally considered the replacement cost.

The assessment of net realizable value is done at each balance sheet date, and inventories are written down to net realizable value on an item-by-item basis. In certain circumstances, similar or related items may be grouped together, such as interchangeable items where it may not be feasible to identify the cost and net realizable value of each item separately.

The proper valuation of inventories at the lower of cost or net realizable value ensures that financial statements reflect a conservative approach and provide an accurate representation of the business's financial position.

4. INVENTORY RECORD SYSTEMS

Two main systems are employed to determine the physical quantities and monetary value of inventories sold and remaining on hand. These systems are known as the "Periodic Inventory System" and the "Perpetual Inventory System." While the periodic system is more cost-effective, the perpetual system provides more valuable information despite its higher implementation costs. These systems differ in terms of the records maintained to calculate the cost of goods sold and the valuation of closing inventory.

4.1 PERIODIC INVENTORY SYSTEM

The periodic inventory system is a method used to determine inventory by physically counting (or measuring or weighing) all the inventory items on hand at a specific date for valuation purposes. This system is often referred to as the physical inventory system due to the actual physical count involved. The cost of goods sold is calculated as follows:

Opening inventory (known) + Purchases (known) - Closing inventory (physically counted) = Cost of goods sold.

The periodic inventory system is straightforward and less costly compared to the perpetual system. In this system, the inventory account is adjusted at the end of the accounting period to calculate the cost of goods sold. However, the periodic inventory system has several limitations:

- (i) Physical inventory counts may be required multiple times a year for the preparation of quarterly or semi-annual financial statements, making it more expensive.
- (ii) Conducting a physical count of goods necessitates temporarily suspending normal business operations.
- (iii) Since the cost of goods sold is derived as a residual figure, it is challenging to identify losses due to pilferage, damage, or fraud.
- (iv) Inventory control is not feasible under this system.
- (v) The books of accounts do not provide real-time visibility of the inventory on hand and its value, making it difficult to plan operations such as determining when and how much to order or manufacture.

The periodic inventory system is commonly used by small enterprises where physical inventory control is more manageable. However, it is generally not considered suitable for medium or larger enterprises, which typically employ the perpetual inventory system.

4.2 PERPETUAL INVENTORY SYSTEM

The perpetual inventory system is a method of recording inventory balances after each receipt and issue. To ensure the accuracy of perpetual inventory records, physical inventory should be checked and compared with the recorded balances. In this system, the cost of goods issued is directly determined, and the inventory of goods is derived as a residual figure using the inventory ledger, which records the flow of goods continuously. The key feature of this system is the maintenance of an inventory ledger that provides ongoing records of goods.

Under the perpetual inventory system, the closing inventory is calculated as follows:

Opening inventory (known) + Purchases during the period (known) - Cost of Goods Sold (known) = Closing Inventory (balancing figure)

The perpetual inventory system helps overcome the limitations of the periodic system. As the inventory is derived as a residual figure, it accounts for losses of goods. However, the main drawback of this system is the associated cost of implementation and maintenance.

4.3 DISTINCTION BETWEEN PERIODIC INVENTORY SYSTEM AND PERPETUAL INVENTORY SYSTEM

The Periodic Inventory System and Perpetual Inventory System are not mutually exclusive; rather, they complement each other and serve different purposes in inventory management. The distinction between these two systems can be explained as follows:

S. No.	Periodic Inventory System	Perpetual Inventory System
1.	This system relies on conducting physical inspections or verifications.	This system is dependent on the records maintained in books or accounting documentation.
2.	This system furnishes specific details regarding the inventory and cost of goods sold as of a particular date.	It offers uninterrupted updates regarding inventory and the cost of sales.
3.	This system calculates the inventory and considers the cost of goods sold as the remaining amount.	It calculates the cost of goods sold directly and calculates the inventory as the balancing figure.
4.	The cost of goods sold includes any loss of goods, as it assumes that goods not present in the inventory have been sold..	The closing inventory accounts for any loss of goods, as it assumes that all unsold goods are included in the inventory.
5.	Inventory control cannot be effectively maintained using this method.	This system allows for effective inventory control to be exercised.
6.	This system offers a straightforward and cost-effective approach.	This method incurs higher.
7.	Counting the inventory under the periodic system necessitates temporary business closure.	Inventory can be determined without disrupting the normal business operations.

5. FORMULAE/METHODS TO DETERMINE COST OF INVENTORY

5.1 HISTORICAL COST METHODS

There is no single formula for determining the historical cost of inventories. Various techniques for inventory valuation are discussed below:

Specific Identification Method:

This method assigns costs to specific goods based on their actual physical flow. It requires keeping separate records for different lots of purchased goods to identify the specific lot from which the remaining units in inventory are taken. The historical cost of such specifically identified inventories can be determined based on their purchase price or production cost.

The specific identification method is typically used to determine the cost of inventories for items that are not interchangeable and have high value, such as expensive medical equipment. Otherwise, it may be necessary to use other methods like FIFO (First In, First Out) or weighted average price/average price formula.

ILLUSTRATION 1

Vik ikram Ltd is engaged in the trading of three distinct products: X, Y, and Z. These products are dissimilar and cannot be interchanged. At the conclusion of the financial year, the company has provided the historical cost and net realizable value (NRV) for each item in the closing stock. We need to determine the value of the closing stock.

Items	Historical Cost (in ₹ Lakhs)	Net Realisable Value (in ₹ Lakhs)
X	20	18
Y	36	33
Z	15	16

SOLUTION

When valuing inventories, the principle of lower of cost and Net Realizable Value (NRV) is applied. It means that inventories are recorded at the lower of their cost or NRV. The determination of the value of closing stocks is done according to the following approach:

Items	Historical Cost (in ₹ Lakhs)	Net Realisable Value (in ₹ Lakhs)	Valuation = Least of Cost or NRV
X	20	18	18
Y	36	33	33
Z	15	16	15
Total			66

(i) FIFO (First in first out) Method

The FIFO (First-In, First-Out) method is based on the principle that costs should be assigned to revenue in the order in which they were incurred. According to this method, it is assumed that the earliest inventory items purchased or produced are the first ones to be consumed or sold. Therefore, the closing inventory consists of the most recently acquired or produced items, and they are valued at the price paid for those specific items.

Using the FIFO formula ensures that inventory is accounted for based on the order of acquisition, which is particularly important for perishable goods or items with frequent technological changes. It aligns with the common business practice of using goods in the order they were acquired. It's important to note that this assumption of cost flow does not necessarily reflect the actual physical movement of goods; it is a method of accounting.

To better understand how the FIFO method is applied, let's consider the following example.

ILLUSTRATION 2

B Ltd. has a record of purchases of light bulbs that are used in the manufacturing of lamps:

Date	Quantity (units)	Price per unit
May. 1	700	40
May. 3	300	50
May. 11	400	60
May. 20	300	40
May. 30	600	30
	2,300	

1,200 units were issued during the month of May till 16th May.

SOLUTION

The closing inventory of B Ltd. consists of 1100 units, which are determined using the FIFO (First-In, First-Out) method. Specifically, it includes:

600 units received on May 30th,

300 units received on May 20th, and

200 units received on May 11th.

	₹
Value of 600 units @ ₹30	18000
Value of 300 units @ ₹40	12000
Value of 200 units @ 60	12000
Total	42,000

(ii) LIFO (Last in first out) Method

The LIFO (Last-In, First-Out) formula is based on the principle of assigning the cost of goods sold to the most recently purchased or produced goods, even if the actual issues are made from the earliest lot on hand to preserve their value. According to this method, the closing inventory is assumed to comprise earlier consignments, and its value is calculated accordingly based on those consignments. Under the LIFO basis, the goods issued are valued at the price paid for the most recent lot of goods on hand, while the inventory of goods remaining is valued at the price paid for the earlier lot of goods. When there are no details available regarding the specific issues, the price paid for the earliest consignments is used to determine the value of the closing inventory. The LIFO method ensures that the current costs are matched with the corresponding current revenue, as the cost of recently purchased or produced goods is attributed to each sale. By using this method, the cost of goods sold reflects the cost of the most recent purchases, allowing for a better alignment of current costs with current sales.

ILLUSTRATION 3

Prepare store ledger from the following records May:

Record of issues

Date	Quantity (units)
May. 5	700
May. 18	200
Total	900

SOLUTION

Computation of closing stock under perpetual inventory system

Record of receipts

Date	Quantity (units)	Price per unit
May. 1	700	40
May. 3	300	50
May. 11	400	60
	1400	

Using LIFO method, following will be stock ledger:

Date	Receipts			Issues			Balance inventory		
	Qty.	Rate	Amount	Qty	Rate	Amount	Qty.	Rate	Amount
1	700	40	28,000	-	-	-	700	40	28,000
3	300	50	15,000	-	-	-	700	40	28,000
							300	50	15,000
5	-	-	-	300	50	15000			
				400	40	16000			
							300	40	12,000
11	400	60	24,000	-	-	-	300	40	12,000
							400	60	24,000
18	-	-	-	200	60	12000	300	40	12000
							200	60	12,000

As a result, the closing inventory cost for 500 units will amount to ₹24,000.

The LIFO (Last-In, First-Out) method is based on the assumption that the most recent inventories entering the stores are issued or consumed first, which is considered irrational and contrary to the observed flow of goods in business entities. It is important to note that when applying LIFO, there may be a discrepancy between the cost of goods sold and the value of the closing inventory, particularly if the entity follows the periodic method of inventory valuation as opposed to the perpetual method (which will be explained later in this chapter). As a result, the usage of the LIFO method for valuing inventories is no longer adopted and is not permitted by Accounting Standards. In practice, FIFO (First-In, First-Out) and Weighted Average Price Method are commonly used among business entities, and both of these methods are permitted by Accounting Standards."

(iii) Simple Average Price Method

The Simple Average price method for valuing inventory is a straightforward approach. It involves adding up all the different prices and then dividing the total by the number of prices. The resulting average price is used to determine the value of the closing inventory. This method is commonly used by entities that employ the periodic inventory method, as it does not require the effort of identifying which consignments or lots the closing inventory belongs to.

ILLUSTRATION 4

Calculate value of closing stock using simple average price method by using data of illustration 2.:

SOLUTION

The simple average in this question is:

$$[(40 + 50 + 60 + 40 + 30)/5] = 220/5 = ₹44$$

1100 units valued at ₹44

So value of closing stock will be $44 * 1100 = 48400$

(iv) Weighted Average Price Method

The calculation of a simple average price does not take into account the quantities purchased in different lots. However, a more appropriate approach would be to calculate a weighted average price by considering the quantities purchased in each lot as weights. With the weighted average price method, the total cost of goods available for sale during a specific period is combined, and then divided by the total number of units available for sale during that period. This enables the calculation of the weighted average price per unit, which provides a more accurate representation.

Thus

500 units at ₹60 = ₹30,000

$$\text{p.u} = \text{Weighted average price} = \frac{\text{Total cost of goods (which are available for sale during the period)}}{\text{Total no. of units (which are available for sale during the period)}}$$

Closing inventory = No. of units in inventory \times Weighted average p.u

Cost of goods sold = No. of units sold \times Weighted average price p.u.

ILLUSTRATION 5

On the basis of the data given in illustration 2 and 3, calculate the weighted average price and also the value of closing inventory by weighted average price method.

SOLUTION

The computation of weighted average price in the referred example is shown below:

A new average rate would be calculated on receiving a fresh consignment. Answer on that basis would be as under:

Date	Receipts			Issues			Balance inventory		
	Qty	Rate	Amount	Qty	Rate	Amount	Qty	Rate	Amount
May 1	700	40	28,000	-	-	-	700	40	28,000
May 3	300	50	15000	-	-	-	1000	43	43000
May 5	-	-	-	700	43	30100	300	43	12900
May 11	400	60	24000	-	-	-	700	52.71	36900
May 18	-	-	-	200	52.71	10542	500	52.71	26358

Perpetual and Periodic Inventory System and Average Methods of Cost of Inventory

The Simple Average Method and Weighted Average Method are implemented differently depending on whether the entity adopts periodic inventory taking or perpetual inventory taking. When periodic inventory taking is used, the inventory available for sale over a period is combined, and an average rate is calculated to determine the valuation of the closing inventory. On the other hand, under perpetual inventory taking, the average rate of the inventory is recalculated with each new purchase, and the subsequent issue is recorded using the updated average rate.

Illustration 5 above is an example of Weighted average method used in perpetual inventory recording system. In case the entity would have been using periodic inventory recording system, closing inventory would have been valued as below:

Receipt during May

Date	Qty.	Rate	Value
May 1	700	40	28,000
May 3	300	50	15,000
May 11	400	60	24,000
Total	1400	47.85	67,000

So, value of closing stock of 500 units will be 23925 @ 47.85 per unit.

5.2 NON-HISTORICAL COST METHODS

Non-historical cost methods do not rely on the historical cost incurred to acquire goods. Two examples of non-historical cost methods are the Adjusted Selling Price method and the Standard Cost method. Let's discuss the Adjusted Selling Price method:

Adjusted Selling Price method-, also known as the retail inventory method, is commonly employed in retail businesses or in cases where the inventory consists of items with unascertainable individual costs. This method is suitable for measuring inventories that involve a large number of rapidly changing items with similar profit margins, making it impractical to use other costing methods. The cost of the inventory is determined by subtracting an appropriate percentage of the gross margin from the sales value of the inventory.

To calculate the estimated gross margin of profit, a percentage is applied, considering any inventory that has been marked down from its original selling price. Typically, an average percentage is used for each retail department. The estimation of gross margin can be done for individual items, groups of items, or by departments, depending on the specific circumstances.

ILLUSTRATION 6

M/s A, B and C are in a partnership, from the following information find out the historical cost for the year ending 31 march 2021 (using adjusted selling price method).

Goods received from suppliers

(without deducting trade discount and adding GST) ₹ 1230000

Trade discount 5% and GST 10%

Packaging and transportation charges ₹ 87,500

Sales during the year 2020-21 ₹ 1850000

Sales value of closing inventories ₹ 190000

SOLUTION

Determination of cost of purchases:

Goods received from suppliers	1230000
Less: Trade discount 5%	(61500)
	1168500
Add: Sales Tax 10%	₹116850
	₹128535
Add: Packaging and transportation charges	₹75000
	₹1360350

Determination of estimated gross profit margin:

Sales during the year	₹1850000
Closing inventory at the selling price	₹190000
	1660000
Less: Purchases	₹(1360350)
Gross profit	₹299650
Gross profit margin	16.19%
Inventory valuation:	
Selling price of closing inventories	₹190000
Less: Gross profit margin 16.19%	₹(30761)
	₹159239

This method is employed when there is frequent fluctuation in the price per unit of goods and the business makes frequent purchases of those goods, such as in the case of crude oil. A standard cost is determined based on the accumulated experience of price changes, and the inventory is valued using this predetermined cost per unit.

6. INVENTORIES TAKING

Typically, a temporary halt in operations occurs for a day or two within the financial year to conduct a comprehensive physical inventory count of all items in the warehouse or store. For year-end inventory valuation, the physical inventory count is conducted during the final week of the financial year or the initial week of the following year. If the inventory count is completed on March 26th, while the accounting year ends on March 31st, any purchases and sales between March 26th and March 31st are separately adjusted. Subsequently, a value is assigned to each item based on the principle of utilizing the lower of cost or net realizable value, either for the entire inventory or on an item-by-item basis.

Ideally, enterprises prefer to conduct inventory counts on the closing day. However, there are instances where inventory counts cannot be performed on the closing day. In such cases, the actual inventory value must be adjusted to relate it to the specific year-end. This adjustment requires taking into account incoming goods (purchases and sales returns) and outgoing goods (sales and purchase returns) during the period between the end of the year and the actual inventory count date. Additionally, all adjustments for goods must be based on their respective costs. Let's consider a scenario where a company's financial year ends on March 31st. However, the inventory count takes place on March 5th of the following year, and the actual inventory value is determined to be ₹550000. Between March 1st and March 5th, the company made purchases totaling ₹90000 and recorded sales amounting to ₹120000. The mark-up on cost is 20%. The inventory on 31st March would be ₹8,32,000 as shown below:

	₹
Inventory ascertained on March 5	550000
Less: Goods purchases during March. 1 to 5	90000
Add: Cost of goods sold during March 1 to 5: 120,000 × (100/120)	100000
	560000

ILLUSTRATION 7

Calculate the value of Inventories as on 31st March, 2021:

	₹
Inventory as on 1.4.2020	138000
Purchases	805000
Manufacturing Expenses	140000
Selling Expenses	60,500
Administrative Expenses	30,000
Financial Charges	21,500
Sales	1050000

During the inventory valuation on March 31st, 2020, a write-off of 15,000 was made for a specific item. This item was originally purchased for 40,000 and was later sold for ₹50,000 within the year. Excluding this particular transaction, the gross profit earned during the year amounted to 15% of the sales.

SOLUTION

Statement of Inventory in trade as on 31st March, 2021

	₹	₹
Inventory as on 1st April, 2020	138000	
Less: Book value of abnormal inventory (₹40,000 - ₹15000)	25,000	113000
Add: Purchases		805000
Manufacturing Expenses		140000
		1058000
Less: Cost of goods sold:		
Sales as per books	1050000	
Less: Sales of abnormal item	50000	
	1000000	
Less: Gross Profit @ 15%	150000	850000
Inventory on 31st March, 2021		208000

ILLUSTRATION 8

Anita typically finalizes their accounts on March 31st each year. However, due to unforeseen circumstances, it was not feasible to conduct an inventory count until April 10th, 2021. On this particular date, it was determined that the total cost of goods in the Anita's premises amounted to ₹450000. During the period between March 31st and April 10th, 2021, several pertinent facts were discovered.

- (i) Sales ₹380000 (including cash sales ₹80,000)
- (ii) Purchases ₹70,500 (including cash purchases ₹19,900)
- (iii) Sales Return ₹20,000.

Goods are sold at profit of 25% on sales.

Ascertain the value of inventory as on 31st March, 2021.

SOLUTION

Statement of valuation of Inventory on 31st March, 2021

	₹	₹
Value of Inventory as on 10th April, 2021		450,000
Add: Cost of goods sold during the period between 31st March, 2021 to 10th April, 2021		
Sales (380,000 - 20,000)		
Less: Gross Profit (25% of ₹4,00,000)	360,000	
	90,000	270,000
		7,20,000
Less: Purchases during the period from 31st March, 2021 to 10th April, 2021		70500
		649500

ILLUSTRATION 9

Inventory taking for the year ended 31st March, 2021 was completed by 12th April 2020, the valuation of which showed a inventory figure of ₹1500000 at cost as on the completion date. After the end of the accounting year and till the date of completion of inventory taking, sales for the next year were made for ₹50000, profit margin being 25% percent on cost. Purchases for the next year included in the inventory amounted to ₹80,000 at cost less trade discount 12 percent. During this period, goods were added to inventory at the mark up price of ₹4,000 in respect of sales returns. After inventory taking it was found that there were certain very old slow-moving items costing ₹12000, which should be taken at ₹8000 to ensure disposal to an interested customer. Due to heavy flood, certain goods costing ₹16000 were received from the supplier beyond the delivery date of customer. As a result, the customer refused to take delivery and net realizable value of the goods was estimated to be ₹11000 on 31st March. Compute the value of inventory for inclusion in the final accounts for the year ended 30th March, 2021.

SOLUTION

Statement showing the valuation of Inventory as on 31st March, 2021

	₹
Value of Inventory as on 12th April	1500000
Add: Cost of goods sold after 31st March till Inventory taking (₹50000 – ₹15000)	45000
Less: Purchases for the next period (80000-12%)	(70400)
Less: Cost of Sales Returns (4000- 20%)	(3200)
Less: Loss on revaluation of slow moving inventories	(4,000)
Less: Reduction in value on account of default	(5,000)
Value of Inventory on 31st March	112400

Note- 25% markup on cost means 20% markup on sales

TEST YOUR KNOWLEDGE

True and False

- Inventories refer to the stocks of goods and materials held by a business entity primarily for the purpose of generating revenue.
Sol. True: Inventories are stocks of goods and materials that businesses maintain with the primary intention of generating revenue
- In a construction business, a building is classified as part of the inventory.
Sol. True, In the context of a construction business, a building under construction is categorized as inventory. This building is part of the ongoing business operations and is intended to be sold as inventory once completed.
- Inventory is assessed by subtracting the percentage decreases from the carrying cost.
Sol. Inventory is assessed based on the lower of its cost or net realizable value for valuation purposes.
- Under the physical inventory system, management has access to up-to-date information on the quantity and valuation of the closing stock on a daily basis.
Sol. False, With the Perpetual Inventory System, management has access to up-to-date information on the closing stock on a daily basis.
- The Periodic Inventory System is often considered more suitable for small enterprises, as it provides a simpler approach to inventory management.
Sol. True, A periodic inventory system is well-suited for small and micro enterprises, particularly when the physical counting of inventory is not a burdensome task.
- If the closing inventory is inaccurately overstated, it will result in an understatement of the net income for the accounting period.
Sol. False, If the closing inventory is inaccurately overstated, it will result in an overstatement of the net income for the accounting period.

7. The cost of inventories should include all the expenses incurred during the purchase process
- Sol. False,** The cost of inventories should include not only the expenses related to the purchase, but also the costs of conversion and other expenses incurred in transporting and preparing the inventories in their current state and location.
8. The costs of converting inventories includes expenses that are specifically associated with the production units, which may involve the allocation of fixed overheads.
- Sol. False,** Costs of conversion of inventories encompass expenses that are directly associated with the production process of units. These costs comprise not only the direct materials and labor involved but also entail the systematic allocation of both fixed and variable overheads.
9. The costs of inventories include abnormal amounts of wasted materials, labor, or other production overhead expenses.
- Sol. False,** The costs of inventories do not include abnormal amounts of wasted materials, labor, or other production overhead expenses.
10. Counting inventory under a perpetual system can be conducted without the need to close the business operations.
- Sol. False,** Under the periodic system, business closure is necessary to conduct inventory counting.

Multiple Choice Questions

1. Calculate the amount purchases
 Cost of goods sold = 20000
 Opening stock = 2000
 Closing stock = 2200
 (a) ₹19800 (b) ₹20000 (c) ₹20400. (d) ₹20200
- Sol.** (d) ₹20200
2. Average Inventory = ₹10,000. Closing Inventory is ₹4000 more than opening Inventory. Find out the value of closing Inventory.
 (a) ₹20000 (b) ₹8000 (c) ₹12000. (d) ₹4000
- Sol.** (c) ₹12000
3. If the profit is 20% of the sales price then it is
 (a) 20% of the cost price (b) 33% of the cost price
 (c) 25% of the cost price (d) None of the above
- Sol.** (c) 25% of the cost price
4. The cost of goods sold =
 (a) Opening stock + purchases (b) Purchases - Closing stock
 (c) Opening stock + purchases - closing stock (d) None of the above
- Sol.** (c) Opening stock + purchases - closing stock

5. How is inventory presented in financial statements?
 (a) Under Fixed Assets (b) Under Current Assets
 (c) Under Current Liabilities (d) Under Investments
Sol. (b)
6. Accounting Standards prohibit the usage of which inventory valuation method?
 (a) FIFO (b) Average cost (c) LIFO (d) None of the above
Sol. (c) Under Current Assets
7. Which inventory costing method calculates the value of the closing inventory by assuming that the most recently purchased inventory remains unsold??
 (a) FIFO (b) LIFO
 (c) Weighted average cost (d) None of the above
Sol. (a) FIFO
8. On which principle is the valuation of inventory based when it is valued at cost or net realizable value?
 (a) Consistency (b) Conservatism (c) Going concern (d) None of the above
Sol. (b) Conservatism
9. In an inflationary trend, which of the methods will reflect the highest inventory value?
 (a) FIFO (b) Weighted average (c) LIFO (d) None of the above
Sol. (a) FIFO
10. Which of the following methods does not take into account the historical cost of inventory??
 (a) Weighted average (b) FIFO
 (c) Retail price method (d) None of the above
Sol. (c) Retail price method

Theory Questions

1. Describe:

- (i) **Adjusted Selling Price method.**
- (ii) **primary methods used to determine the cost of inventory.**

Sol. Adjusted selling price method- The adjusted selling price method, also known as the retail inventory method, is commonly utilized in retail businesses or when dealing with inventory that consists of items with unknown individual costs. This approach allows for estimating the historical cost of inventory by initially determining it based on the selling price and subsequently subtracting an estimated gross margin of profit on those particular stocks. It is a practical way to assess inventory value when detailed cost information for individual items is not readily available.

Primary methods used to determine the cost of inventory- The determination of inventory cost is commonly achieved through the use of three principal methods: specific identification, First-In-First-Out (FIFO), and weighted average cost formulae. The specific identification method involves assigning costs to inventory items based on their individual identification, which is particularly suitable for non-interchangeable items and goods or services allocated to specific projects. On the other hand, FIFO assumes that the first items acquired or produced are the first ones to be sold, while the weighted average cost formula calculates the average cost of inventory based on the total cost and quantity of goods. These methods provide businesses with different approaches to ascertain inventory cost based on their specific needs and circumstances.

2. Write down the differences between :

- (i) LIFO and FIFO.**
- (ii) FIFO and weighted average price method.**

Sol. i. Under the FIFO (First-In-First-Out) method of inventory valuation, the assumption is that the items of inventory that were purchased or produced first are the ones that are consumed or sold first. As a result, the closing inventory is valued using the most recent purchase prices, while inventory issues are valued using the corresponding older purchase prices. In simpler terms, the costs are assigned to the units issued in the same order as they were entered in the inventory records. In periods when prices are rising, following the FIFO method results in reporting higher profits because the cost of goods sold is based on older and lower prices.

On the other hand, the LIFO (Last-In-First-Out) method of inventory valuation values the units of inventory issued at the prices paid for the most recent purchases, while the closing inventories are valued at the prices paid for earlier purchases. This means that the closing inventories are valued using older purchase prices, and the issues are valued using the corresponding latest purchase prices.

ii. Under the FIFO (First-In-First-Out) method of stock valuation, the assumption is that the goods issued are typically from the earliest batch received. Therefore, the remaining stock on hand consists of the most recent consignments. The closing stock is valued based on the price paid for these recent consignments.

On the other hand, the weighted average price method is different from a simple average price method. With this method, a stock ledger is maintained to track daily receipts and issues. Whenever a new consignment is received, a new average price is calculated by taking into account the previous stock value and the cost of the new consignment. This average price is determined by dividing the total value of the preceding stock and the new consignment by the total units of the preceding stock and the new consignment. This results in a weighted average price.

3. Define inventory. Explain the importance of proper valuation of inventory in the preparation of statements of the business entity.

Sol. Inventory can be defined as the assets held by a business entity that meet one of the following criteria:

Items held for sale in the regular course of business.

Items in the process of being produced for sale.

Items consumed in the production of goods or services for sale, including maintenance supplies and consumables (excluding machinery spares).

The valuation of inventory holds significance for several reasons:

- (i) Determination of Income:** Proper valuation of inventory is crucial for accurately determining the cost of goods sold and calculating the gross profit or loss, which ultimately impacts the determination of income.
- (ii) Ascertainment of Financial Position:** The value of inventory directly affects the balance sheet by impacting the calculation of assets, specifically the current assets. Proper valuation helps in presenting an accurate financial position of the business.
- (iii) Liquidity Analysis:** Inventory valuation plays a role in assessing the liquidity of a business. It provides insights into the availability of stock that can be converted into cash through sales.
- (iv) Statutory Compliance:** Compliance with accounting standards and legal requirements necessitates proper inventory valuation. Accurate reporting ensures adherence to regulations and facilitates transparency in financial statements.