

COOPERATIVE ACCOUNTING AND AUDITING

LEVEL – II

**Based on January 2022, Version Occupational
standard**



Module Title: - Maintain Inventory Records

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Introduction to the Module

Dear learner, the Ethiopian TVET system is now focused on the labor market demands and industry relevance. This translates that the main objectives of the TVET system is to qualify its graduates according to the occupational requirements of the industry. In this learning guide there are three learning outcome which are broke down in to three information sheets. These are listed as follows Process inventory purchase, Record inventory, **reviews invoices** flows **and** Reconcile inventory records to general ledger. In this learning guide, some learning activities and self-check exercises are included to make your study clear, attractive and precise. These are very important in deepening and enhancing your understanding of the learning out comes in the module. If you skip doing those activities and exercises, your level of understanding will be limited and insufficient. As a result, you are strongly dedicated and encouraged to do it on time accordingly. Upon the completion of the module you will be able to perform the objectives listed on instruction sheet.

Learning Outcomes:

At the end of the module the trainees will be able to:

- Process inventory purchase
- Record inventory flows
- Reconcile inventory records to general ledgers

This module describes knowledge, skills and attitude required to comply with organizational inventory procedures, reconcile inventory record to general ledgers, record inventory flows and prepare schedule

LG #7

LO #1- Process inventory purchase

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Concept of inventory
- Types of inventories
- Identifying Inventory documents
- Differentiating FOB destination and FOB shipping
- Determining cost of items purchased
- Methods of Recording purchase of inventory
- Maintaining periodic and perpetual records of inventory

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Concept of inventory
- Types of inventories
- Identify Inventory documents
- Differentiation FOB destination and FOB shipping
- Determine cost of items purchased
- Methods of Recording purchase of inventory
- Maintaining periodic and perpetual records of inventory

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the information Sheets
4. Accomplish the Self-checks
5. Perform Operation Sheets
6. Do the “LAP test”

Information Sheet 1

1.1. Concept of inventory

1.1.1. Definition of inventory

The literary meaning of the word inventory is stock of goods. It constitutes the second largest items after fixed assets in the financial statements, particularly of manufacturing organization. It is why that inventory valuation and inventory control have become very important functions of the accountants and finance managers.

According to the International Accounting Standard-2 (IAS-2), 'Inventories' mean tangible property held;

- (a) For sale in the ordinary course of business,
- (b) In the process of production for such sale, or
- (c) For consumption in the production of goods or services for sale.

1.1.2. Types of inventory

- Merchandise inventory
- Manufacturing inventory
 - ✓ Raw materials
 - ✓ Work in process
 - ✓ Finished goods
 - ✓
- **Raw materials inventory**- Direct materials in stock and awaiting use in manufacturing process, For example: Wood need to manufacture different furniture's by wood worker company.
- **Work-in-process inventory**- Goods partially worked but not yet completed. This is also called work-in-progress inventory.

- **Finished goods inventory**- Goods completed but not yet sold – these are finished goods a waiting for sale. Example: Table, Bed, etc- completed product by the wood worker, which is waiting for sale

1.2. Identifying Inventory documents

- Delivery reports
- Invoices from suppliers
- Purchase orders
- Purchase requisitions
- Stock card and bin card

1.3. Differentiating FOB destination and FOB shipping

The terms of the agreement between buyer and seller include provisions concerning (1) when the ownership (title) of the merchandise passes to the buyer and (2) which party is to bear the cost of delivering the merchandise to the buyer. If the ownership passes to the buyer when the seller delivers the merchandise to the shipper, the buyer is to absorb the transportation costs and the terms are said to be FOB shipping point.

FOB shipping point means that the seller places the merchandise free on board at the shipping point and the buyer is responsible for the transportation costs beyond that point. If ownership passes to the buyer when the merchandise is received by the buyer, the seller is to assume the costs of transportation and the terms are said to be FOB destination. FOB destination means that the seller places the merchandise “free on board” to its destination by paying the delivery costs. The relationship of the shipping terms to the passage of ownership and who is to bear the costs or transportation is summarized in the following table.

Table 1.1.

	FOB Shipping point	FOB Destination
Ownership (title) Passes to buyer when Merchandise is	delivered to shipper	delivered to buyer
Transportation costs Are become by	buyer	seller

1.4.Determining the cost of inventory

In most businesses, inventories will be sold at a profit so they will be measured at cost (since this is lower than NRV).

Many of the provisions of IAS 2 result from the commonsense application of the principle that the cost of inventory is expenditure incurred in bringing items to their present location and condition. Such costs will include the purchase price of goods acquired for resale or the raw materials that are to be used in a production process. Any discounts or rebates that have been received should be deducted from the cost.

It is only the costs that are directly attributable to bringing the goods to their current state which should be included. These may include import duties, transport and other handling costs. For inventory that is subject to some form of production or conversion process, additional costs will be incurred as part of this process which should also be included in the cost of inventory. Such amounts may include direct manufacturing and direct labor costs as well as a systematic allocation of fixed (costs that will be incurred regardless of the level of output) and variable (costs determined based on the level of output) overheads that are incurred as part of the production process.

Fixed overheads should be allocated to each production process on a systematic basis. It will generally be appropriate to allocate an element of fixed overheads based on normal levels of production.

It is not appropriate to allocate to inventory abnormal costs or administrative costs that do not contribute to bringing the inventory to their current state; instead such amounts should be recognized in profit or loss in the period in which they are incurred.

Example: The following costs have been identified as either being part of the costs of inventories or those that should be expensed as incurred.

- **Cost of inventory Include**

- ✓ Supplier's gross price for raw materials
- ✓ Quantity discounts allowed by supplier (deduct from cost)

- ✓ Costs of transporting materials to the business premises
- ✓ Labor costs directly incurred in the processing of raw materials
- ✓ Variable costs, such as power, incurred in the processing of raw materials
- ✓ Fixed production costs/overheads, such as rent for the processing factory
- ✓ Depreciation charges on the plant used in the processing

- **Expensed as Incurred**

- ✓ Costs of transporting goods to customers on sale
- ✓ Non-recoverable purchase taxes charged to customers on sale
- ✓ Non-recoverable sales taxes
- ✓ Commission payable to salesmen on the sale of the goods
- ✓ Provisions for bad and doubtful debts in relation to trade receivables
- ✓ Costs of the accounts department
- ✓ Head office costs relating to the overall management of the business

Costs recoverable (neither Inventory or expensed)

- Purchase taxes and duties charged by the supplier and recoverable from the taxing authorities.

Example 2: A business plans for fixed production overheads of Br50, 000 and annual production is estimated at 100,000 items in its financial year. The planned overhead recovery rate is Br0.50 per item (Br50, 000 per 100,000 items).

A fire at the factory results in production being only 75,000 units although there is no saving in the level of fixed production overheads.

Inventory should still be valued on the basis of Br0.50 per item, leading to a recovery of Br37, 500 of overheads with the balance of Br12, 500 being expensed directly in the year.

1.5.Methods of Recording purchase of inventory

There are two principal systems of inventory accounting:

- I. Periodic Inventory System and
- II. Perpetual Inventory System

I. Periodic inventory system

Under this system there is no continuous record of merchandise inventory account. The inventory balance remains the same throughout the accounting period, i.e. the beginning inventory balance. This is because when goods are purchased, they are debited to the purchases account rather than merchandise inventory account.

The revenue from sales is recorded each time a sale is made. No entry is made for the cost of goods sold. So, physical inventory must be taken periodically to determine the cost of inventory on hand and goods sold.

The periodic inventory system is less costly to maintain than the perpetual inventory system, but it gives management less information about the current status of merchandise. This system is often used by retail enterprises that sell many kinds of low unit cost merchandise such as groceries, drugstores, hardware etc.

The journal entries to be prepared are:

1. At the time of purchase of merchandise:

Purchases	XX			
Accounts payable or cash	XX			
2. At the time of sale of merchandise:

Accounts receivable or cash	XX			
Sales	XX			
3. To record purchase returns and allowance:

Accounts payable or cash	XX			
Purchase returns and allowance	XX			
4. To record adjusting entry or closing entry for merchandise inventory:

Income Summary	XX			
Merchandise inventory (beginning)		XX		
To close beginning inventory				
Merchandise inventory (ending)	XX			
Income summary	XX			
To record ending inventory				

II. Perpetual inventory system

Under this system the accounting record continuously disclose the amount of inventory. So, the inventory balance will not remain the same in the accounting period. All increases are debited to merchandise inventory account and all decreases are credited to the same account.

There are no purchases and purchase returns and allowances accounts in this system. At the time of sale, the cost of goods sold is recorded in addition to Journal entry for the sale. So, we can determine the cost of inventory as well as goods sold from the accounting record. No need of physical counting to determine their costs. Companies that sell items of high unit value, such as appliances or automobiles, tended to use the perpetual inventory system.

Given the number and diversity of items contained in the merchandise inventory of most businesses, the perpetual inventory system is usually more effective for keeping track of quantities and ensuring optimal customer service. Management must choose the system or combination of systems that is best for achieving the company's goal.

Journal entries to be prepared are:

1. At the time of purchase of merchandise

Merchandise inventory	XX	at cost	}
Accounts payable/cash		XX	
To record cost of goods sold			
2. At the time of sale of merchandise

Accounts receivable or cash	XX	at retail price	}
Sales		XX	
To record cost of goods sold			
To record the sales			
Cost of goods sold	XX	at cost	}
Merchandise inventory		XX	
To record the cost of merchandise sold			
3. To record purchase returns and allowances

Accounts payable or cash	XX	
Merchandise inventory		XX
4. No adjusting entry or closing entry for merchandise inventory is needed at the end of each accounting period.

1.6.Determining Actual Quantities in the Inventory

The first stage in the process of taking an inventory is to determine the quality of each kind of merchandise owned by the enterprise. When the periodic system is used, the counting, weighing and measuring should be done at the end of the accounting period. To accomplish this, the inventory crew may work during the night or business operations may be stopped until the count is finished.

The details of the specific procedures for determining quantities and assembling the data differ among companies. A common practice is to use teams made up of two persons. One person counts, weighs, or otherwise determines quantity, and the other lists the description and the quantity on inventory sheets. The quantity indicated for high cost items is verified by a third person at some time during the inventory taking period. It is also advisable for the third person to verify other items selected at random from the inventory sheets.

Self-check 1	Written test
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Name..... ID..... Date.....

Directions: Answer all the questions listed below.

Test I: Short Answer Questions (4 point)

- Which one of the following is NOT included on Cost of inventory?
 - Quantity discounts allowed by supplier (deduct from cost)
 - Costs of transporting goods to customers on sale
 - Costs of transporting materials to the business premises
 - Labor costs directly incurred in the processing of raw materials
- The purchase of inventory items on account using the perpetual inventory method:
 - Decrease working capital and the current ratio
 - Has no effect on working capital but decrease the current ratio
 - Has no effect on the current ratio but decreases working capital
 - Has no effect on working capital or the current ratio
- Goods completed but not yet sold is called _____
 - Raw material
 - Inventory
 - Finished good
 - Work in process
- Which one of the following is TRUE about periodic inventory system?
 - It is high cost to maintain than the perpetual inventory system
 - At the time of sales purchase of merchandise is not recorded
 - Required adjusting entry or closing entry
 - At the time of sale, the cost of goods sold is recorded

Test II: Choose the best answer (16 point)

1. What are types of inventory?

2. Write the difference between periodic inventory system and perpetual inventory system

3. Write the difference between FOB destination and FOB shipping

Note: Satisfactory rating - 20 points

Unsatisfactory - below 15 points

Operation Sheet -1

1.1 Recording inventory.

A. Equipment

I. Computer

II. Ruler

III. Stationaries

B. Procedures in recording inventory

Step 1; obtains purchase and sales invoice

Step 2; select inventory recording system

Step 3; record purchase and sales on journal

Illustration 1. In its beginning inventory on Jan 1, 2002, NINI Company had 120 units of merchandise that cost Br. 8 Per unit. The following transactions were completed during 2002.

February 5 Purchased on credit 150 units of merchandise at Br. 10 per unit.

Returned 20 defective units from February 5 purchases to the supplier.

June 15 Purchased for cash 230 units of merchandise at Br 9 per unit.

September 6 Sold 220 units of merchandise for cash at a price of Br. 15 per unit.

These Goods are: 120 units from the beginning inventory and 100 units for February Purchases.

December 31 260 units are left on hand, 30 units from February 5 purchases

Based on the above information record inventory under

I. Periodic inventory system

II. Perpetual inventory system

Date	I. Periodic inventory system	II. Perpetual inventory system
February 5	Purchases (150 x Br.10) 1500 Account payable 1500	Merchandise inventory 1500 Account payable 1500
February 9	Accounts payable (20 x Br. 10) 200 Purchase returns and allowances 200	Accounts payable 200 Merchandise inventory 200
June 15	Purchases (230 x Br. 9) 2070 Cash 2070	Merchandise inventory 2070 Cash 2070
Sept 6	Cash (220 x Br. 15) 3,300 Sales 3300	Cash (220 x Br. 15) 3,300 Sales 3300 To record cost of merchandise sold Cost of merchandise sold 1,960 Merchandise inventory 1960
December 31	To record or close the merchandise inventory account;- Income summary (120 x Br. 8) 960 Merchandise inventory (beginning) 960 To close the beginning inventory Merchandise inventor (ending 2370 Income summary 2,370	No entry is needed to record or close merchandise inventory account

LAP TEST-1	Performance Test
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Name..... ID.....

Date.....

Time started: _____ Time finished: _____

Instructions: you are required to perform the following tasks within **hour**. The project is expected from each student to do it.

Illustration 1. In its beginning inventory on Jan 1, 2014, NINI Company had 120 units of merchandise that cost Br. 10 per unit. The following transactions were completed during 2022.

February 9 Purchased on credit 140 units of merchandise at Br. 9 per unit.

Returned 15 defective units from February 5 purchases to the supplier.

June 20 Purchased for cash 250 units of merchandise at Br 9 per unit.

September 6 Sold 220 units of merchandise for cash at a price of Br. 15 per unit.

These Goods are: 120 units from the beginning inventory and 100 units for February Purchases.

December 31 260 units are left on hand, 30 units from February 5 purchases

1. Record the above transaction

Task 1 under periodic inventory system

Task 2 under perpetual inventory system

LG #8

LO #2- Record inventory flows

Instruction sheet

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Applying Inventory flow assumptions
- Inventory valuation Methods
- Determining cost of goods sold and ending inventory

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Apply Inventory flow assumptions
- Inventory valuation Methods
- Determine cost of goods sold and ending inventory

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
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Information Sheet 2

2. Applying Inventory flow assumptions

1.1.1. Inventory flow assumptions

There are three methods commonly used in assigning costs to inventory and cost of merchandise sold. These are:

- **Specific identification**

When each item in inventory can be directly identified with a specific purchase and its invoice, we can use specific identification (also called specific invoice pricing) to assign costs. This method is appropriate when the variety of merchandise carried in stock is small and the volume of sales is relatively small. We can specifically identify the items sold and the items on hand.

- **First-in first-out (FIFO)**

This method of assigning cost to inventory and the goods sold assumes inventory items are sold in the order acquired. This means the cost flow is in the order in which the expenditures were made. So, to determine the cost of ending inventory, we have to start from the most recent purchase and continue to the next recent. Because the first purchased items (old purchases) are the first to be sold they are used (included) in the computation of cost of goods sold

- **Weighted average**

This method of assigning cost requires computing the average cost per unit of merchandise available for sale. That means the cost flow is an average of the expenditures.

1.1.2. Comparison of Inventory costing methods

If the cost of units and prices at which they are sold remains stable, all the four methods yield the same results. But if prices change, the three methods usually yield different amounts for:

- ✓ Ending inventory
- ✓ Cost of merchandise sold
- ✓ Gross profit or net income

- In periods of rising (increasing) prices: (or if there is inflationary trend):
 - ✓ FIFO yields Higher ending inventory
 - Lower cost of merchandise sold
 - Higher gross profit (net income)

- In periods of declining (decreasing) prices:
 - ✓ FIFO yields; Lower ending inventory
 - Higher cost of merchandise sold
 - Lower gross profit or net income

1.2. Inventory valuation Methods

- I. lower of cost or market
- II. Net realizable value
- I. Lower of cost or market

The lower of cost or market (LCM) method states that when valuing a company's inventory, it is recorded on the balance sheet at either the historical cost or the market value. Historical cost refers to the cost at which the inventory was purchased.

The value of a good can shift over time. This holds significance, because if the price at which the inventory can be sold falls below the net realizable value of the item, thus triggering a loss for the company, then the lower of cost or market method can be employed to record the loss.

- The lower of cost or market (LCM) method relies on the fact that when investors value a company's inventory, those assets shall be recorded on the balance sheet at either the market value or the historical cost.
- Historical cost refers to the cost of inventory, at the time it was originally purchased.
- The LCM method takes into account that the value of a good can fluctuate. Under this scenario, if the price at which the inventory may be sold dips below the net realizable value of the item, which consequently results in a loss, the LCM method can be employed to record the loss.

It was explained how costs are assigned to ending inventory and cost of goods sold using one of three costing methods (FIFO, Weighted average, or specific identification). Yet, the cost of inventory is not necessarily the amount always reported on a balance sheet. Accounting principles require that inventory be reported at the market value of replacing inventory when market is lower than cost. Merchandise inventory is then said to be reported on the balance sheet at the lower of cost or market (LCM).

- **LCM is applied in one of three ways:**

- ✓ Separately to individual item
- ✓ To major categories of items
- ✓ To the whole of inventory

The less similar the items are that make up inventory, the more likely it is that companies apply LCM to individual items. Advances in technology further encourage the individual item application.

- **Accounting for Lower of Cost and NRV (LCNRV)**

To account for the loss if NRV is lesser than the original cost, entity may choose one of the ways:

- I. Make adjustment in the inventory account directly to record the loss
- II. Make contra-asset account to record the loss

I. Recording loss directly in inventory account

If entity chooses to record written-down loss directly in inventory account then it has to be credited. However, which account is to be debited depends on the presentation of expenses in income statement and entity's policy to record such losses. Entity may choose either of the following options:

- A. Report the loss as cost of sales/cost of goods sold
- B. Report the loss separately

A. Recording LCNRV loss as cost of goods sold and directly in inventory

Under this method once the loss is determined, cost of goods sold account is debited and inventory account is credited to record the write-down loss on inventory.

B. Recording LCNRV loss as separate account and directly in inventory

Under this method instead of debiting the loss to cost of goods sold, a separate account with appropriate name is debited and then closed in profit and loss. Credit aspect is however, recorded in same inventory account.

Example

Example 1: EEC has inventories of different supplies. Cost of year-end inventory is Br7.39 million. However, recent prices of most supplies decrease in the market. Therefore, its NRV of inventory of supplies is Br5.3 million only.

Give the journal entry to record the write-down loss if EEC is using:

- I. cost of sales method
- II. Separate account method

Solution:

I. Cost of sales method:

Write-down loss is: $7.39\text{m} - 5.3\text{m} = 2.09\text{m}$. The journal entry will be as following:

Cost of goods sold	2,090,000	
Inventory		2,090,000

II. Separate account method:

In this method a separate account with appropriate title e.g. “Inventory written-down loss” will be used to record the loss which is later closed in profit and loss as follows:

Inventory written-down loss	2,090,000	
Inventory		2,090,000

i. Recording loss in contra-asset account (Allowance account)

In the above method, we saw that recording LCNRV loss inventory account is credited or in simple words reduced to reflect NRV.

However, instead of altering inventory account, loss is recorded in separate contra-asset account. This way the original inventory value is kept in records and also lower of cost and NRV rule is achieved because inventory value is reported as a net of inventory account and contra-asset account in the financial statements. On the other hand, it's up to entity whether it likes to record loss as part of cost of sales or separately in the income statement. So even in this approach it's up to entity which account to debit.

Example 2: Give the journal entry to record the write-down loss of EEC's inventory of supplies if it is using:

1. cost of sales method
2. Separate account method

Solution:

1 Cost of sales method

Cost of goods sold	2,090,000	
Allowance for NRV loss		2,090,000

2 Separate account method

Inventory written-down loss	2,090,000	
Allowance for NRV loss		2,090,000

ii. Recovery of LCNRV loss

Though prices of inventory hardly rise again once fallen, however, in some cases inventory's NRV may recover and rise. In such cases, entity is permitted to reverse the previously recognized loss.

The accounting treatment for such reversals again depends upon applicable rules, standards and the manner in which loss was recognized previously. In case of IFRSs, entity is required to reduce the amount of inventory recognized as expense on to account for reversal in NRV loss. And in other cases where allowance is used, then allowance is adjusted. However, one thing is

common i.e. value of inventory cannot be more than the original cost of inventory. In other words, amount of reversal cannot be higher than original write-down loss.

Self-Check – 2	Written test
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Name..... ID..... Date.....

Directions: Answer all the questions listed below.

Test I: Multiple choice

- Valuation of inventories requires the determination of all of the following except.
 - The costs to be included in inventory
 - The physical goods to be included in inventory
 - The cost of goods held on consignment from other companies.
 - The cost flow assumption to be adopted
- The ending inventory of the plc. Company is understated in year one by Br. 20, 000. This error is not corrected in year one or in year two. What impact will this error have on total net income for years one and two combined?
 - No effect on total net income for the two years
 - Overstate total income by Br. 20, 000
 - Understate total income by Br. 20, 000
 - Overstate net income for year one by Br. 20, 000 and year two by Br. 20, 000 for a total overstatement of Br. 40, 000
- Which of the following inventory methods comes closest to stating ending inventory at replacement cost?
 - FIFO
 - LIFO
 - Weighted-average
 - Base Stock

4. The use of LIFO under a perpetual inventory system (units and costs):
 - A. May yield a higher inventory valuation than LIFO under a periodic inventory system when prices are steadily falling.
 - B. May yield a higher inventory valuation than LIFO under a periodic inventory system when prices are steadily rising.
 - C. Always yields the same inventory valuation as LIFO under a periodic inventory system.
 - D. Can never yield the same inventory valuation as LIFO under a periodic inventory system
5. The purchase of inventory items on account using the perpetual inventory method:
 - E. Decrease working capital and the current ratio
 - F. Has no effect on working capital but decrease the current ratio
 - G. Has no effect on the current ratio but decreases working capital
 - H. Has no effect on working capital or the current ratio

Test II: Short Answer Questions

1. write and discussed methods of estimating inventory cost:

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.....

.....

2. write and discussed the two Inventory valuation Methods

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.....

.....

Note: Satisfactory rating – 15 points Unsatisfactory - below points 10

You can ask your teacher for the copy of the correct answers

Operation Sheet -2

2.1.Determining ending inventory and cost of goods sold

- **Equipment, system and methods of recording inventory**

A. Equipment

I. Computer

II. Calculator

B. System of Inventory records

i. Periodic inventory system

ii. Perpetual inventory system

C. Methods of determining ending inventory and cost of goods sold

i. Specific identification method

ii. First-in first-out (**FIFO**)

iii. Average method

Illustration 2; Smart Cooperatives began the year and purchased merchandise as follows:

Jan-1	Beginning inventory	80 units@ Br. 60 = Br. 4,800
Feb. 16	Purchase	400 units@ 56 = 22,400
Sep.2	Purchase	160 units @ 50 = 8,000
Nov. 26	Purchase	320 units@ 46 = 14,720
Dec. 4	Purchase	240 units@ 40 = 9,600

The ending inventory consists of 300 units, 100 from each of the last three purchases

Based on the above information

Task 1;Determine ending inventory and cost of goods sold under periodic method inventory system

1. By using Specific identification method

- Calculate ending inventory
- Calculate cost of goods sold..

2. By using First-in first-out (FIFO) method

- calculate cost of available for sale
- calculate ending inventory

- Calculate cost of goods of sold
3. By using average method
- Calculate ending inventory
 - Calculate cost of goods sold

Task 2; Based on the above information Determine ending inventory and cost of goods sold under perpetual inventory system

1. By using First-in first-out (FIFO) method
- calculate cost of available for sale
 - calculate ending inventory
 - Calculate cost of goods of sold
2. By using average method.
- Calculate ending inventory
 - Calculate cost of goods sold.

Solution

1. Cost of ending inventory and cost of goods sold under **specific identification method** (periodic)

$$\text{Br}40 \times 100 = \text{Br. } 4,000$$

$$\text{Br. } 46 \times 100 = 4,600$$

$$\text{Br. } 50 \times 100 = 5,000$$

$$300 \text{ units } \text{Br. } 13,600$$

$$\text{Cost of Ending inventory} = \text{Br. } \underline{13,600}$$

$$\text{The cost of goods sold} = \text{Cost of goods available for sale} - \text{Ending inventory}$$

$$= \text{Br. } 59,520 - \text{Br. } 13,600 = \text{Br. } \underline{45,920}$$

2. Cost of ending inventory and cost of goods sold under **First-in, First-out (FIFO) method**

$$\text{Br. } 40 \times 240 = \text{Br. } 9,600$$

$$\text{Br. } 46 \times 60 = 2,760$$

$$300 \text{ units } \text{Br. } 12,360$$

$$\text{Cost of Ending inventory} \quad \text{Br. } \underline{12,360}$$

$$\text{Cost of merchandise sold} = \text{Br. } 59,520 - \text{Br. } 12,360 = \text{Br. } \underline{47,160}$$

3. Cost of ending inventory and cost of goods sold under **weighted average method**

To calculate the cost of ending inventory, we will calculate first the cost per unit of goods available for sale

Average cost per unit = $\frac{\text{Cost of goods available for sale}}{\text{Total units available for sale}}$

Weighted average unit cost = Br. 59,520 \div 1,200 = Br. 49.6

Ending inventory cost = Br. 49.60 x 30 = Br. 14,880

Cost of merchandise sold = Br. 59,520 - Br. 14,880 = Br. 44,640

Illustration #2. The beginning inventory, purchases and sales of ABC Company for the month of January are as follows:

		Units	Cost
January 1. Inventor		12	Br. 10.00
6 Sale		5	
10 purchase	10		Br. 12.00
20 Sale	8		
25 purchase		8	Br. 12.50
25 Sale		10	
30 purchase	15		Br. 14.00

- i. Based on the above information **Determine cost of goods sold and ending inventory under perpetual inventory system**

under First-in first-out (FIFO) method

- calculate cost of available for sale
- calculate ending inventory
- Calculate cost of goods of sold

By using average method.

- Calculate ending inventory
- Calculate cost of goods sold.

Units on hand = units available for sale – units sold
 = (15 + 10 + 8 + 15) – (5 + 8 + 10) = 48 - 23 = 25

Perpetual – FIFO

Date	Purchase			Cost of merchandise sold			Inventory		
	Qty	Unit cost (Br)	Total cost (Br)	Qty	Unit cost (Br)	Total cost (Br)	Qty	Unit cost (Br)	Total cost (Br)
Jan. 1							15	10.00	150.00
6				5	10.00	50.00	10	10.00	100.00
10	10	12.00	120.00				10	10.00	100.00
							10	12.00	120.00
20				8	10.00	80.00	2	10.00	20.00
							10	12.00	120.00
25	8	12.50	100.00				2	10.00	20.00
							10	12.00	120.00
							8	12.50	100.00
27				2	10.00	20.00	2	12.00	24.00
				8	12.00	96.00	8	12.50	100.00
30	15	14.00	210.00				2	12.00	24.00
							8	12.50	100.00
							5	14.00	210.00
				23		246.0	25		334.00

So, the cost of merchandise sold and ending inventory under perpetual- FIFO method are Br. 246 and Br. 334 respectively.

Perpetual – Average Cost Method (Moving Average)

Date	Purchase			Cost of merchandise sold			Inventory		
	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost
Jan. 1							15	Br. 10.00	Br. 150.00
6				5	Br. 10.00	Br. 50.00	10	10.00	100.00
10	10	12.00	Br. 120.00				20	11.00 = 100+120 10+10	220.00
20				8	11.00	88.00	12	11.00	132.00
25	8	12.00	100.00				20	11.60 + 132+100 12+8	232.00
27				10	11.60	116.00	10	11.60	116.00
30	15	14.00	210.00				15	13.04 116+210 10+15	326.00
				23		Br. 254.00	25	Br. 13.04	Br 326.00

Weighted average unit cost = Br. 580 = Br. 12.08

Ending inventory cost = Br. 12.08 x 25 = Br. 302

Cost of merchandise sold = Br. 580 – Br. 302 = Br. 278

LAP TEST-2

Performance Test

Name..... ID.....

Date.....

Time started: _____ Time finished: _____

Instructions: you are required to perform the following tasks within **1** hour. The project is expected from each student to do it.

Illustration 1.ABC Enterprise's beginning inventory and purchases during the fiscal year ended March, 2014, were as follows:

April 1, 2014	Inventory-----	1,000	@50.00	\$50,000
April 10, 2014	Purchase-----	1,200	@52.50	\$63,000
May 30, 2014	Purchase-----	800	@55.00	\$44,000
August 26, 2014	Purchase-----	2,000	@56.00	\$112,000
October 15, 2014	Purchase-----	1,500	@57.00	\$85,500
December 31, 2014	Purchase-----	700	@58.00	\$40,600
January 18, 2014	Purchase-----	1,350	@60.00	\$81,000
March 21, 2014	Purchase-----	<u>450</u>	@62.00	<u>\$27,900</u>

ABC Enterprise uses the periodic inventory system, and there are 3,200 units of inventory on hand on March 31, 2014.

Task-1 by using periodic inventory system FIFO method

1. Calculate cost of available for sale.
2. Calculate ending inventory
3. Calculate cost of goods sold..

Task-2 by using periodic inventory system AW Method

1. calculate cost of available for sale
2. calculate ending inventory
3. Calculate cost of goods of sold

Task-3 by using perpetual inventory system FIFO method

1. Calculate cost of available for sale.
2. Calculate ending inventory

3. Calculate cost of goods sold.

Task-4. By using perpetual inventory system AW Method

1. calculate cost of available for sale
2. calculate ending inventory
3. Calculate cost of goods of sold

LG #9	LO #3 – Reconcile inventory records to general ledgers
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Instruction sheet
<p>This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:</p> <ul style="list-style-type: none"> • Reconciling inventory records • Identifying discrepancies on stock and bin card <p>This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:</p> <ul style="list-style-type: none"> • Reconcile inventory records • Identify discrepancies on stock and bin card
Learning Instructions:
<ol style="list-style-type: none"> 1. Read the specific objectives of this Learning Guide. 2. Follow the instructions described below. 3. Read the information written in the information Sheets 4. Accomplish the Self-checks

Information Sheet 3

2.1.Reconciling inventory records

Inventory reconciliation is the process of matching your inventory records to the physical stock on your shelves or in your warehouse. It involves counting your inventory, comparing those numbers against what's recorded in your POS system, identifying discrepancies and what may have caused them.

Inventory reconciliation helps merchants maintain accurate recorded inventory levels, avoid stock outs or overstocking, improve demand forecasting, and maintain an accurate ledger of the value of their inventory on-hand. It's an essential part of effectively managing your store's inventory.

Stock card and Bin Card

The process of stocktaking involves checking the physical quantity and the values of inventory held on a certain date and then checking this balance against the balances on the stores ledger (record) cards or bin cards. Stocktaking can be carried out on a periodic basis or a continuous basis.

2.2. Identifying discrepancies on stock and bin card

An inventory discrepancy occurs when the inventory recorded in the warehouse management system (WMS) or your inventory management system differs from what's actually on the shelf.

- **Reasons for Stock Discrepancies:**

The possible reasons for discrepancy between physical stock and stock shown in records may be due to the following:

- Shortage of material due to spoilage, evaporation, wastage in material handling, breakdown in handling and storing. Increase in weight due to absorption of water etc.
- Items of material placed in wrong location.
- Pilferage and theft from stores by insiders and outsiders.
- Issue and receipt of stock without proper recording and maintenance of stores recording and accounting.
- Stock returns not recorded properly.

- f. Stock issues to production departments without proper recording in stock card and stores ledger.
- g. Arithmetical errors in calculating the balances in bin card.
- h. Clerical errors in stores ledger.
- i. Supplier supplies a different quantity of material than is mentioned in the delivery note.
- j. Discrepancy due to improper weighing of material.

- **Steps to Avoid Stock Discrepancies**

Steps to be taken to avoid discrepancies in physical stock and stock as shown in records are as follows:

- A. Entry into the stores should be restricted only to authorized persons.
- B. Material requisition should be signed only by the authorized person
- C. Proper maintenance of stores records like bin card/stock card, stores ledger
- D. Regular check by independent staff to detect and correct mistakes
- E. Issue of material only against proper requisition slip
- F. Recording of all movements of stock
- G. Physical verification and counting at the time of receipt and issue of material
- H. Use of FIFO method for stock issues for avoidance of deterioration and obsolescence
- I. Accounting Procedure for Material Shortages:
- J. Action to be taken and to record the information:
- K. The units shown in the stock card and stores ledger is to be compared and further check it with the physical verification of units.

Self-Check –3

Written test

Name..... ID..... Date.....

Directions: Answer all the questions listed below.

Test I: Multiple choice

- _____ is the process of matching your inventory records to the physical stock on your shelves or in your warehouse
 - Inventory records
 - Inventory reconciliation
 - Inventory system
 - Maintaining inventory
- Which one of the following is **not** reasons for stock discrepancies?
 - Stock issues to production departments without proper recording
 - Arithmetical errors in calculating the balances in bin card
 - Stock returns not recorded properly
 - Recording of all movements of stock
- Which one of the following is not Steps to Avoid Stock Discrepancies
 - Material requisition should be signed only by the authorized person
 - Proper maintenance of stores records like bin card/stock card, stores ledger
 - Regular check by independent staff to detect and correct mistake
 - Discrepancy due to improper weighing of material

Test II. Short answer (16 point)

- write and discussed Reconciling of inventory records:

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- write and discussed at list 5 Reasons for Stock Discrepancies

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Reference Materials

Books:

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Horngren, Sundem : Introduction to Financial Accounting and Elliot 8th Edition, (2002) Parson Education Inc.

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Kieso and Weygandt : Intermediate Accounting, 9th Edition, (1998) John Wiley & sons ,Inc.

Web addresses

<https://www.investopedia.com/term/i/inventory.asp>

50+ FREE Printable Inventory List Templates [Doc, Excel] » ExcelSHE

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