

2. Inventory Cost :-

Purchase Price
+ Freight -in
+ Costs in curred preparing goods for sales
= Inventory Cost
Goods on consignment is :
Consignee- Exclude from physical count
Consignee- Add to physical count
Cost of Goods on Consignment = Inventory + Cost of shipping
Cost to consignee

3. Cost of Goods Sold :-

Beginning Inventory + Net Purchase
= Cost OF Goods Available for sale + Ending Inventory
= Cost of Goods Sold.

Average cost method: Price items in the inventory of the basis of the average cost of all similar goods Available during the period.

Date of invoice	<u>no. units</u>	<u>units cost</u>	<u>total cost</u>
March 2	\$2,000	\$4,00	\$8,000
March 15	6,000	4,40	26,400
March 30	2,000	4,75	<u>9,500</u>
Total goods available	10,000		\$43,900
Weighted -average cost per unit $\$43,900 / 10,000 = \$4,39$			
Inventory in units	6,000 units		
Ending inventory	6,000 * \$4,39 =	\$26,340	
Cost of Goods Available for sale			\$43,900
Deduct : Ending inventory			<u>26,340</u>
Cost of goods sold			<u>\$17,560</u>

First in. First out (FIFO): Assumes that goods are used in the order in which they Are purchased.
It assumes that the first goods purchased are the first used Or sold.

ILLUSTRATION:

FIFO Method – Periodic Inventory

Date	NO. Units	Unit Cost	Total Cost
March 30	2,000	\$4,75	\$9,500
March 15	4,000	4,40	<u>17,600</u>
Ending inventory	6,000		\$27,100
Cost of goods available for sale			\$43,900
Deduct : Ending inventory			<u>27,100</u>
Cost of goods sold			<u>\$16,800</u>

ILLUSTRATION

FIFO Method-Perpetual Inventory:-

Date	Purchased	Sold or Issued	Balance
March 2	(2,000* \$4,00) \$8,000		2,000*\$4,00 \$8,000
March 15	(6,000* 4,40) 26,000		{2,000*\$4,00 } \$34,400 { 6,000*\$4,40 }
March 19		{ 2,000*\$4,00 }	4,000*4,40 17,600
March 30	(2,000*4,75) 9,500	{ 2,000*\$4,40 } (\$15,800)	{ 4,000*4,40 } 27,100 { 2,000*4,70 }

.In all cases where FIFO is used, the inventory and cost of goods sold would be the same at The end of the month whether perpetual or periodic system is used.

. Last in, Last Out (LIFO) THIS METHOD FIRST MATCHES AGAINST REVENUE THE COST OF THE LAST GOODS PURCHASED.

The example assumes the cost of the 4000 units withdrawn absorbed the 2000 units purchased on March 30 and 2000 of the 6000 units purchased on March 15 , the inventory and related cost of goods sold would be computed as follows ,

ILLSTRATION

LIFO Method – Periodic inventory:-

Date of invoice	NO. Units	unit cost	Total cost
March 2	2,000	\$4,00	\$8,000
March 15	<u>4,000</u>	4,40	17,600
Ending inventory	6,000		\$25,600
	Goods available for sale	\$43,900	
	Deduct Ending inventory	25,600	
	Cost of goods sold	\$18,300	

.If we use another method

ILLUSTRATION

LIFO Method-Perpetual Inventory:-

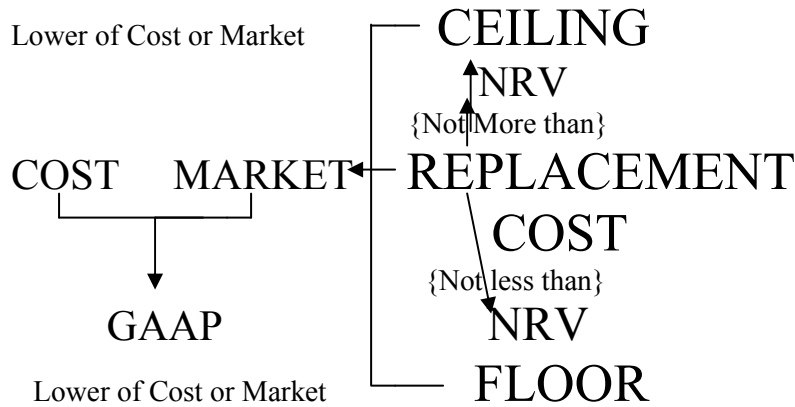
Date	Purchased	Sold or Issued	Balance
March 2	(2,000 * \$4,00) \$8,000		(2,000*\$4,00) \$8,000
March 15	(6,000 * \$4,40) 26,400		2,000*\$4,00 } \$34,400 6,000*\$4,40 }
March 19		(4,000 * \$4,40) \$17,600	2,000*\$4,00 } \$16,800 2,000*\$4,40 }
March 30	(2,000 * \$4,75) \$9,500		2,000*\$4,00 } 2,000*\$4,40 } \$26,300 2,000*\$4,75 }

.Net realizable value: It is the estimated selling price in the ordinary course of business less reasonably predictable costs of completion disposal.

. The rule of lower cost or market value:

In which inventory is valued at the lower of cost or market, with market limited to an amount that is not more than Net realizable value or less than net realizable value less a normal profit margin.

Inventory Valuation –



. Designated market value: Is always the middle value of three amounts,

1. Replacement cost
2. Net realizable value
3. Net realizable value less a normal profit margin

ILLSTRATION

COMPUTATION OF Designed Market Value

Food	Replacement Cost	Net Realizable Value (Ceiling)	Net Realizable Value Less a Normal Profit Margin (Floor)	Designed Value
Spinach	\$88,000	\$120,000	\$104,000	\$ 104,000
Carrots	90,000	100,000	70,000	90,000
Cut beans	45,000	40,000	27,500	45,000
Peas	36,000	72,000	48,000	48,000
Mixed vegetables	105,000	92,000	80,000	92,000

Designed Market Value Decision :

Spinach: Net realizable value less a normal profit margin is selected because it is middle value.

Carrots: Replacement cost is selected because it is middle value.

Cut beans: Net realizable value is selected because it is middle value.

Peas : Net realizable value less a normal profit margin is selected because it is middle value

Mixed vegetables: Net realizable value is selected because it is the middle value.

DEMONSTRATION PROBLEM

The Audiophile sells high-performance stereo equipment. Massachusetts Acoustic recently introduced the Carnegie-440, STATE-OF-THE-ART Speaker system. During the current year, The Audiophile purchased 9 of these Speaker systems at the following dates and acquisition costs:

Date	Units purchased	Unit cost	Total cost
Oct. 1	2	\$3,000	\$6,000
Nov.17.....	3	3,200	9,600
Dec. 1	4	3,250	13,000
Available for sale during the year	9		\$28,600

On November 21, The Audiophile sold 4 of these speaker systems to the Boston Symphony. The other 5 Carnegie-440s remained in inventory at December 31.

INSTRUCTIONS: Assume that The Audiophile uses perpetual inventory system. Compute(1) The cost of goods sold relating to the sale of Carnegie-440 speakers to the Boston Symphony, and (2)the ending inventory of these speakers at Dec.31 Using each of the following flow assumptions:

- A. Average cost
- B. First-in, first-out (FIFO)
- C. Last-in, first-out (LIFO)

Show the number of units and the unit costs of the cost layers comprising the cost of goods sold and the ending inventory

SOLUTION TO DEMONSTRATION PROBLEM

- A. (1) Cost of goods sold (at average cost):
 Average unit cost ay Nov.21
 [(\$6,000+\$9,600) /5 units].....\$3,120
 Cost goods sold (4units*\$3,120 per unit).....\$12,480
 (2) Inventory at Dec.31 (at average cost) :
 Average unit cost at Dec.31:
 Units remaining offer sale of Nov.21
 (1 unit *\$3,120).....\$3,120
 unit purchased on Dec.1 (4units *\$3,250)....\$13,000
 Total cost of 5 units in inventory.....\$16,120
 Average unit cost at Dec.31..... \$3,224
 Inventory at Dec.31 (5 units * \$3,224 per unit)..... \$16,120
- B. (1) Cost of goods sold (FIFO basis): (2units * \$3,000
 +2units*\$3,200)..... \$12,400
 (2) Inventory at Dec.31 (4units *\$3,250 +1unit *\$3,200)..... \$16,200
- C. (1) Cost of goods sold (LIFO basis): (3units*\$3,200+1unit*\$3,000)..... \$12,600
 (2) Inventory at Dec.31 (4units * \$3,250+1unit*\$3,000).....\$16,000