



Defination

An inventory valuation allows a company to provide a monetary value for items that make up their inventory. Inventories are usually the largest current asset of a business, and proper measurement of them is necessary to assure accurate financial statements. If inventory is not properly measured, expenses and revenues cannot be properly matched and a company could make poor business decisions.

Objective

A primary issue in accounting for inventories is the determination of the value at which inventories are carried in the financial statements until the related revenues are recognised. This Statement deals with the determination of such value, including the ascertainment of cost of inventories and any write-down thereof to net realisable value.

Scope of Accounting Standard 2

1. This Statement should be applied in accounting for inventories other than:
 - (a) Work in progress arising under construction contracts, including directly related service contracts (see Accounting Standard (AS) 7, Accounting for Construction Contracts3);
 - (b) Work in progress arising in the ordinary course of business of service providers;
 - (c) Shares, debentures and other financial instruments held as stock-in-trade; and
 - (d) Producers' inventories of livestock, agricultural and forest products, and mineral oils, ores and gases to the extent that they are measured at net realisable value in accordance with well established practices in those industries.

2. The inventories referred to in paragraph 1 (d) are measured at net realisable value at certain stages of production. This occurs, for example, when agricultural crops have been harvested or mineral oils, ores and gases have been extracted and sale is assured under a forward contract or a government guarantee, or when a homogenous market exists and there is a negligible risk of failure to sell. These inventories are excluded from the scope of this Statement.

Variable costs are expenses that change in proportion to the activity of a business. Variable cost is the sum of marginal costs over all units produced. It can also be considered normal costs. Fixed costs and variable costs make up the two components of total cost. Direct Costs, however, are costs that can easily be associated with a particular cost object. However, not all variable costs are direct costs. For example, variable manufacturing overhead costs are variable costs that are indirect costs, not direct costs. Variable costs are sometimes called unit-level costs as they vary with the number of units produced.

Definitions

3. The following terms are used in this Statement with the meanings specified:

Inventories are assets:

- (a) Held for sale in the ordinary course of business;
- (b) In the process of production for such sale; or
- (c) In the form of materials or supplies to be consumed in the production process or in the rendering of services.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

4. Inventories encompass goods purchased and held for resale, for example, merchandise purchased by a retailer and held for resale, computer software held for resale, or land and other property held for resale. Inventories also encompass finished goods produced, or work in progress being produced, by the enterprise and include materials, maintenance supplies, consumables and loose tools awaiting use in the production process. Inventories do not include machinery spares which can be used only in connection with an item of fixed asset and whose use is expected to be irregular; such machinery spares are accounted for in accordance with Accounting Standard (AS) 10, Accounting for Fixed Assets.

Measurement of Inventories

5. Inventories should be valued at the lower of cost and net realisable value.

Cost of Inventories

6. The cost of inventories should comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Costs of Purchase

7. The costs of purchase consist of the purchase price including duties and taxes (other than those subsequently recoverable by the enterprise from the taxing authorities), freight inwards

and other expenditure directly attributable to the acquisition. Trade discounts, rebates, duty drawbacks and other similar items are deducted in determining the costs of purchase.

Costs of Conversion

8. The costs of conversion of inventories include costs directly related to the units of production, such as direct labour. They also include a systematic allocation of fixed and variable production overheads that are incurred in converting materials into finished goods. Fixed production overheads are those indirect costs of production that remain relatively constant regardless of the volume of production, such as depreciation and maintenance of factory buildings and the cost of factory management and administration. Variable production overheads are those indirect costs of production that vary directly, or nearly directly, with the volume of production, such as indirect materials and indirect labour.
9. The allocation of fixed production overheads for the purpose of their inclusion in the costs of conversion is based on the normal capacity of the production facilities. Normal capacity is the production expected to be achieved on an average over a number of periods or seasons under normal circumstances, taking into account the loss of capacity resulting from planned maintenance. The actual level of production may be used if it approximates normal capacity. The amount of fixed production overheads allocated to each unit of production is not increased as a consequence of low production or idle plant. Unallocated overheads are recognised as an expense in the period in which they are incurred. In periods of abnormally high production, the amount of fixed production overheads allocated to each unit of production is decreased so that inventories are not measured above cost. Variable production overheads are assigned to each unit of production on the basis of the actual use of the production facilities.
10. A production process may result in more than one product being produced simultaneously. This is the case, for example, when joint products are produced or when there is a main product and a by-product. When the costs of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis. The allocation may be based, for example, on the relative sales value of each product either at the stage in the production process when the products become separately identifiable, or at the completion of production. Most by-products as well as scrap or waste materials, by their nature, are immaterial. When this is the case, they are often measured at net realisable value and this value is deducted from the cost of the main product. As a result, the carrying amount of the main product is not materially different from its cost.

Valuation of Inventories – AS-2

1. Introduction

1. Accounting Standard 2–(AS-2) issued by the Institute of Chartered Accountants of India (ICAI) deals with method of accounting for valuation of inventories. This standard was originally introduced by the ICAI in 1981; however it became mandatory only from 1.4.1999.
2. Basically, the main objective of having an accounting standard is to achieve ‘Comparability’ i.e., enabling comparison of operating results of two years of the same entity or comparing the operating results of different entities of the same industry.

3. The wealth & future of the business is based on the inventory and its valuation. It is one of the most important items stated on Assets side of the Balance Sheet and plays an important role in determining the operational & financial results.
4. Generally it is the second largest item after fixed assets in the financial statements of a manufacturing organisation. The value attached to inventories can materially affect the operating result & financial position. However different bases of valuing inventories are used by different business and even by different undertakings within the same industry.
5. The statement applies to financial statements prepared on Historical Cost basis. Different considerations would be involved for statement prepared on other basis.
6. The inventory is the main item which can convert profit making unit into loss making & vice-versa. As per AS-1, i.e. Disclosure of Accounting Policies & disclosure of true & fair view, Inventory Valuation plays very important role.
7. As provided in the Companies Act 1956 Part I & II of Schedule VI and MAOCARO & now Companies (Auditor's Report) order 2003 issued by Central Government of India w.e.f. 1.4.2004, Inventory Valuation shown as per AS 2 gives better disclosure, reliability and comparability.

2. Objective of AS-2

1. The determination of the value at which inventories are carried in the financial statements until the related revenues are recognised, including the ascertainment of cost of inventories.
2. However, there will be on impact on 'Profit' or taxable income and Current Assets for disclosure of true & fair view of financial position & working results under companies act 1956.
3. The mandatory AS-2 is also applicable in respect of financial statements audited under section 44AB of the Income Tax Act, 1961.

3. Coverage

1. The standard lays down the coverage & valuation of inventories
2. Inventories encompass goods purchased & held for resale it can be raw material, finished goods or work in progress & stores & spares, Packing Material etc.

Definitions

The standard defines & stipulates the following factors to be considered for inventories are assets:

Held for sale in the ordinary course of business; In the process of production for such sale; or In the form of materials or supplies to be consumed in the production process or in the rendering of services.

Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

3. The cost of inventories should comprise all cost of purchase, cost of conversion & other cost incurred in bringing the inventories to that present location and condition.
4. It must be noted and clarified that AS-2 does not apply to.

Work-in Progress in Construction Contracts-AS-7

Work-in progress in case of service provides.

Inventory of live stock agricultural and forest products, mineral oils, ores and gases as specified in paras 1(d) of As-2.

Not includes machinery spare dedicated to a particular machinery or equipment and use of the spare is irregular.

Shares, debentures and financial instruments held as stock-in trade.

Question arises as to how the inventory of shares, debentures and financial assets held as stock-in trade should be valued as AS-2 which mandates lower of cost or net realisable value method of valuation is not applicable and the method of valuation prescribed by AS-13 dealing with investments to be lower of cost and fair value is also not applicable. Prudence requires the basis of valuation to be lower of cost of purchase. Cost of purchase in this case would be cost of the security plus brokerage and transfer charges.

AS 13 also deals with “current” or short term investments this would be applicable to inventory of shares & securities.

5. Paras 12 and 13 of AS-2 prescribe as to what is excluded whilst computing COST. These are: Abnormal wastage of labour and materials. Storage costs, unless those costs are necessary in the production process prior to further production. Administrative overheads that do not contribute to bringing inventories to their present location and condition. Selling and distribution costs. Interest and other borrowing Costs. Trade discounts & rebates, duty drawbacks.
6. Inclusion of Excise duty in inventory valuation.

The cost of purchase consists of the purchase price including duties & taxes (other than those subsequently recoverable by the enterprise from the taxing authorities)

As per the Guidance Note issued by the institute of Chartered Accountants of India, the excise duty is a cost incurred to bring the inventories to their present location and condition and accordingly it is required to be considered as an element of cost for inventory valuation.

7. In this connection MODVAT (now CENVAT) will not form part of cost of purchase.
8. Increase or decrease of exchange rate variation will be part of cost of inventories.
9. It must be noted that the Expert committee of the Institute of has consistently opined that interest cannot form of cost of inventories even if production or conversion of an item of inventory takes a long time.

However, interest can be part of cost of inventories which take long period of time to get completed before the inventory is ready for sale e.g. wine, timber etc.

Inventory Accounting Systems: The two most widely used inventory accounting systems are the periodic and the perpetual.

- ◇ **Perpetual:** The perpetual inventory system requires accounting records to show the amount of inventory on hand at all times. It maintains a separate account in the subsidiary ledger for each good in stock, and the account is updated each time a quantity is added or taken out.
- ◇ **Periodic:** In the periodic inventory system, sales are recorded as they occur but the inventory is not updated. A physical inventory must be taken at the end of the year to determine the cost of goods sold. Regardless of what inventory accounting system is used, it is good practice to perform a physical inventory at least once a year.

Periodic Versus Perpetual Systems

There are fundamental differences for accounting and reporting merchandise inventory transactions under the periodic and perpetual inventory systems.

To record purchases, the periodic system debits the Purchases account while the perpetual system debits the Merchandise Inventory account.

To record sales, the perpetual system requires an extra entry to debit the Cost of goods sold and credit Merchandise Inventory.

By recording the cost of goods sold for each sale, the perpetual inventory system alleviated the need for adjusting entries and calculation of the goods sold at the end of a financial period, both of which the periodic inventory system requires.

In Perpetual Inventory System there must be actual figures and facts.

Using Non-cost Methods to Value Inventory: Under certain circumstances, valuation of inventory based on cost is impractical. If the market price of a good drops below the purchase price, the lower of cost or market method of valuation is recommended. This method allows declines in inventory value to be offset against income of the period. When goods are damaged or obsolete, and can only be sold for below purchase prices, they should be recorded at net realizable value. The net realizable value is the estimated selling price less any expense incurred to dispose of the good.

Methods Used to Estimate Inventory Cost: In certain business operations, taking a physical inventory is impossible or impractical. In such a situation, it is necessary to estimate the inventory cost.

Two very popular methods are 1- retail inventory method, and 2 - gross profit (or gross margin) method. The retail inventory method uses a cost to retail price ratio. The physical inventory is valued at retail, and it is multiplied by the cost ratio (or percentage) to determine the estimated cost of the ending inventory.

The gross profit method uses the previous year's average gross profit margin (i.e. sales minus cost of goods sold divided by sales). Current year gross profit is estimated by multiplying current year sales by that gross profit margin, the current year cost of goods sold is estimated by subtracting the gross profit from sales, and the ending inventory is estimated by adding cost of goods sold to goods available for sale.

Inventory Costing Methods: Recall that a perpetual inventory system means the inventory accounts are adjusted after each sale or purchase transaction. Under FIFO, the cost of the goods that were acquired by the company first, is transferred from Inventory to Cost of Goods Sold upon a sale. In other words, when a sale takes place, the cost of units from the earliest inventory layer is expensed first. If there are not enough units in the first layer, the unit cost from the next layer is expensed and so on like that.

First In First Out (FIFO) - Definition and Explanation

The **First In First Out (FIFO) Method** of costing is used to introduce the subject of **Materials Costing**. The FIFO method of costing issued materials follows the principle that materials used should carry the actual experienced cost of the specific units used. The method assumes that materials are issued from the **Oldest Supply** in stock and that the cost of those units when placed in stock is the cost of those same units when issued. However, FIFO costing may be used even though physical withdrawal is in a different order.

Advantages of First In First out (FIFO) Costing Method:

Advantages Claimed for First In First (FIFO) Out Costing method are:

1. Materials used are drawn from the cost record in a logical and systematic manner.
2. Movement of materials in a continuous, orderly, single file manner represents a condition necessary to and consistent with efficient materials control, particularly for materials subject to deterioration, decay and quality are style changes.

FIFO Method is Recommended Whenever:

1. The size and cost of units are large.
2. Materials are easily identified as belonging to a particular purchased lot.
3. Not more than two or three different receipts of the materials are on a materials card at one time.

Illustration: 1

Brid’s Drills Co. has Following Transaction in the Month of February 2013

February 2013	
(1)	Beginning balance: 800 units @ ` 6 per unit.
(4)	Received 200 units @ ` 7 per unit.
(10)	Received 200 units @ ` 8 per unit.
(11)	Issued 800 units.
(12)	Received 400 units @ ` 8 per unit.
(20)	Issued 500 units.
(25)	Returned 100 excess units from the factory to the storeroom to be recorded at the latest issued price.
(28)	Received 600 units @ ` 9 per unit.

**Calculation for the Above Transactions Would be as Follows
FIFO Method**

February:			
01. Beginning balance	800 units @ ` 6	` 4,800	
04. Received	200 units @ ` 7	` 1,400	
10. Received	200 units @ ` 8	` 1,600	` 7,800
11. Issued	800 units @ ` 6		` 4,800
Balance	200 units @ ` 7	` 1,400	
	200 units @ ` 8	` 1,600	` 3,000
12. Received	400 units @ ` 8	` 3,200	` 6,200
20. Issued	200 units @ ` 7	` 1,400	
300 units @ ` 8	` 2,400	` 3,800	
Balance	300 units @ ` 8	` 2,400	
25. Returned to storeroom	100 units @ ` 8	` 800	
28. Received	600 units @ ` 9	` 5,400	8,600
Balance	400 units @ ` 8	` 3,200	
	600 units @ ` 9	` 5,400	` 8,600

Disadvantages or Limitations of FIFO Method

FIFO Method is definitely awkward if frequent purchases are made at different prices and if units from several purchases are on hand at the same time. Added costing difficulties arise when returns to vendors or to the storeroom occur.

Weighted Average Method: This method assumes that all inventories available are best represented by a weighted average cost. The average cost of goods held in inventory is recalculated every time a fresh purchase is made and goods issued or sold out of inventory are priced at such average price till such time as the next lot is purchased.

Weighted Average Cost is a method of calculating Ending Inventory cost. It is also known as AVCO. It takes Cost of Goods Available for Sale and divides it by the total amount of goods from Beginning Inventory and Purchases. This gives a Weighted Average Cost per Unit. A physical count is then performed on the ending inventory to determine the amount of goods left. Finally, this amount is multiplied by Weighted Average Cost per Unit to give an estimate of ending inventory cost.

Illustration: 2

The following is the record of receipts of certain material during the month of february 2013:

Feb1. Received 400 units for job no. 12 @ ` 10 per unit

Feb 4. Received 300 units for job no.13 @ ` 11 per unit

Feb 16. Received 200 units for job no. 14 @ ` 12 per unit

Feb 25 Received 400 units for job no. 15 @ ` 13 per unit.

Durig february 2013 following issue of material are made.

- Feb 10. Issued 200 units to job no.12
- Feb 15 Issued 100 units to job no.13
- Feb 17. Issued 200 units to job no. 12
- Feb 20. Issued 200 units to job no 14
- Feb 26. Issued 100 units to job no. 13
- Feb 28. Issued 200 units to job no. 15

Show how these transaction will appear in the stores ledger and state the amount of inventory of feb 28, 2013.

Solution

Fifo Method

Receipts					Issues						Balance	
Date	job no.	Qty	Rate	Amt	Date	Job no.	Qty	Due	Rate	Amt	Qty	Amt
2013					2013							
Feb.1	12	400	10	4,000	Feb.						400	4,000
Feb 4	13	300	11	3,300	Feb.						700	7,300
					Feb.10	12	200	200	10	2,000	500	5,300
					Feb.15	13	100	200	11	1,100	400	4,200
Feb.16	16	200	12	2,400	Feb.17	12	200		10	2,000	600	6,600
					Feb.20	14	200		12	2,400	400	4,600
Feb.25	15	400	13	5,200	Feb.26	13	100	100	11	1,100	200	2,200
					Feb.28	15	200	200	13	2,600	600	7,400
Total	1300			14,900			1000			11,200	300	3,700

Illustrtion: 3

From the following details calculate value of closing stock on 31-12-2010 according to (a) fifo method and (b) weighted average method.

Date	Transaction	No. of units	Rate per unit
1-12-2010	Opening stock	4000	30.00
4-12-2010	Purchased	8000	32.10
8-12-2010	Issued	9000	
12-12-2010	Purchased	7000	32.50

16-12-2010	Issued	6000	
20-12-2010	Purchased	9000	32.30
23-12-2010	Issued	8000	
25-12-2010	Purchased	6000	33.25
27-12-2010	Issued	9000	
29-12-2010	Purchased	10000	32.50
31-12-2010	Issued	7000	32.50

Solution**Fifo Method**

Purchases				Issued			Balance		
Date	Units	`	Total	Units	`	Total	Units	`	Total
1.12.10	Opening						4000	30	1,20,000
4.12.10	8000	32.10	2,56,800				4000	30	1,20,000
							8000	32.1	2,56,800
8.12.10				4000	30	12,0,000			
				5000	32.1	1,60,500	3000	32.1	96,300
12.12.10	7000	32.5	2,27,500				3000	32.1	96,300
							7000	32.5	2,27,500
16.12.10				3000	32.1	96,300			
				3000	32.5	97,500	4000	32.5	1,30,000
20.12.10	9000	32.3	2,90,700				4000	32.5	1,30,000
							9000	32.3	2,90,700
23.12.10				4000	32.5	1,30,000			
				4000	32.3	1,29,200	5000	32.3	1,61,500
25.12.10	6000	33.25	1,99,500				5000	32.3	1,61,500
							6000	33.25	1,99,500
27.12.10				5000	32.3	1,61,500			
				4000	33.25	1,33,000	2000	33.25	66,500
29.12.10	10000	32.5	3,25,000				2000	33.25	66,500
						10,000	32.5	325,000	
31.12.10				2000	33.25	66,500			
				5000	32.5	1,62,500	5000	32.5	1,62,500

The Closing Stock 5000 Units Amountin to ` 1,62,500

Weighted Average Method

Receipts				Issued			Balance	
Date	Units	Rate	Total	Units	Rate	Total	Units	Value
1.12.10	Opening						4000	120000
4.12.10	8000	32.1	2,56,800				12000	376800
8.12.10				9000	31.4	2,82,600	3000	94200
12.12.10	7000	32.5	2,27,500				10000	321700
16.12.10				6000	32.17	1,93,020	4000	128680
20.12.10	9000	3.3	2,90,700				13000	419380
23.12.10				8000	32.26	2,58,080	5000	161300
25.12.10	6000	33.25	1,99,500				11000	360800
27.12.10				9000	32.8	2,95,200	2000	65600
29.12.10	10000	32.5	3,25,000				12000	390600
31.12.10				7000	32.55	2,27,850	5000	162750

The Closing Stock 5000 Units Amounting To ` 1,62,750

Illustration: 4

The following transaction took place in respect of a material

Date	Receipt Quantity (Units)	Rate	Issue Quantity (Units)
02/03/2008	200	2.00	-
10/03/2008	300	2.40	-
15/03/2008	-	-	250
18/03/2008	250	2.60	-
20/03/2008	-	-	300

Prepare a Stock register as per:

- (a) Simple Average Method
- (b) Weighted Average Method.

Solution*(ICWAA Adapted)***Stock Register (Weighted Average Method)**

Date	Receipts			Issues			Balance		
	Qty	Rate	Amt	Qty	Rate	Amt	Qty	Rate	Amt
02/03/2008	200	2.00	400	-	-	-	200	2.00	400
10/03/2008	300	2.40	720	-	-	-	500	2.24	1,120
15/03/2008	-	-	-	250	2.24	560	250	2.24	560
18/03/2008	250	2.60	650	-	-	-	500	2.42	1,120
20/03/2008	-	-	-	300	2.42	726	200	2.42	484

Illustration: 5

From the following data you are required to compile a valued stock card in respect of material 'Mikytoya' for the month of April 2007 and value the closing stock by:

(a) Weighted average method (b) First Out Method

April 1 Opening stock 100 units @ ` 15 per unit

April 4 Received 90 units under GRN no. 301 @ ` Per unit

April 7 Issued 80 units under Issue note no. 501

April 11 Received 200 units under GRN no.302 @ ` 17 per unit

April 14 Issued 150 units under Issue Note No 502

April 21 Received 20 units under GRN no.303 @ ` 25 per unit

April 25 Issued 100 units under Issue Note no 503

April 27 Received 50 units under GRN no. 304 ` 16 per unit

Solution**Stock Card (Weighted Average Method)**

Date April	Doc Ref.	Receipts			Issue			Balance		
		Qty	Rate	Amt	Qty	Rate	Amt	Qty	Rate	Amt
1								100	15	1,500
4	Gm 301	90	16	1,440				190	15.47	2,940
7	In 501				80	15.47	1,238	110	15.47	1,702
11	Gm 302	200	17	3,400				310	16.46	5,102
14	In502				150	16.46	2,496	160	16.46	2,633

21	Gm303	20	25	500				180	17.41	3,133
25	In 503				100	17.41	1,741	80	17.40	1,392
27	Gm 304	50	16	800				130	16.86	2,192
	360		6,140	330		5,448				

FIFO Method

Date April	Doc Ref.	Receipts			Issue			Balance		
		Qty	Rate	Amt	Qty	Rate	Amt	Qty	Rate	Amt
1								100	15	1,500
4	GRN 301	90	16	1,440				100	15	1,500
7	IN 501				80	15	1,200	20	15	300
							90	16	1,140	
							110		1,740	
							20	15	300	
							90	16	1,140	
11	GRN 302	200	17	3,400				200	17	1,140
							310		5,140	
14	IN 502				20	15	300	160	17	2,720
							90	16	1,440	
							40	17	680	
							150	2,20	160	17
21	GRN 303	20	25	500				20	25	500
							180		3,220	
25	IN 503				100	17	1,700	60	17	1,020
							20	25	500	
							80		1,520	
27	GRN 304	50	16	800				60	17	1,020
							20	25	500	
							50	16	800	
		360	6,140	330		5,320				

Illustration: 6

(MU, DFM, 2001)

Following date pertains to Raw Material 'Timmy' during the month September 2000

01/09/2000 Opening Balance 100kg. @ ` 15 per kg.

04/09/2000 GRN 903 90kg. @ ` per kg.
 07/09/2000 M.R.95 80 kg.
 11/09/2000 GRN 908 200kg. @ ` 17 per kg.
 14/09/2000 M.R. 959 150 kg
 20/09/2000 GRN 923 20kg. @ ` 25 per kg
 24/09/2000 M.R. 963 100kg
 29/09/2000 GRN 942 50kg @ ` per kg.

From the above details. You are required to find out:

- (a)
- (i) Value of total issues under “weighted average” Method
 - (ii) Quantity and value of closing stock under
 - (i) Weighted average
 - (ii) FIFO
 - (iii) Average purchase price per unit, during the month.
- (b) If
- (i) 2 kgs of “Timmy” are required to manufacture 1 unit of “Tommy” and
 - (ii) Other conversion cost per unit of Tommy are ` 6 per unit and Company want to earn 30% profit on sales.

What should be selling price per unit of “Tommy”?

Solution

Stock Register (Weighted Average Method)

Date April	Doc Ref.	Receipts			Issue			Balance		
		Qty	Rate	Amt	Qty	Rate	Amt	Qty	Rate	Amt
1								100	15.00	1,500
4	GRN 903	90	16	1,440				190	15.47	2,940
7	MR 951				80	15.47	1,238	110	15.47	1,702
11	GRN 908	200	17	3,400				310	16.46	5,102
14	MR959				150	16.46	2,496	160	16.46	2,633
20	GRN923	20	25	500				180	17.41	3,133
24	MR963				100	17.41	1,741	80	17.40	1,740
29	GRN942	50	16	800				130	16.86	2,196
		360		6,140	330		5,448			

(a) Simple Average = $\frac{16 + 17 + 25 + 16}{4} = \text{` 18.50 per unit}$

Weighted Average Method = $\frac{6140}{360} = \text{` 17.06 Per unit}$

Weighted Average:

Raw Material 2kg. x ` 17.06 = 34.11

Other Conversion Costs = 6,00

Total Cost = 40.11

(+) Profit (30 on Sales) = 17.19

Selling Price = 57.30

Stock Register (FIFO Method)

Date April	Doc Ref.	Receipts			Issue			Balance		
		Qty	Rate	Amt	Qty	Rate	Amt	Qty	Rate	Amt
1								100	15	1,500
4	GRN 903	90	16	1,440				100	15	1,500
								90	16	1,440
								190		2,940
7	MR 951				80	15,47	1,238	20	15	300
								90	16	1,440
								110		1,740
11	GRN 908	200	17	3,400				20	15	300
								90	16	1,440
								200	17	3,400
								310		5,140
14	MR959				20	15.00	300			
					90	16.00	1,440	160	17	2,720
					40	17.00	680			
					150		2,420			
20	GRN923	20	25	500				160	17	2,720
								20	25	500
								180		3,220
24	MR963				100	17.41	1,741	60	17	1,020
								20	25	500
								80		1,520

29	GRN942	50	16	800				60	17	1,020
								20	25	500
								50	16	800
								130		2,320
		360		6,140	330		5,448			

(b) Input 2 Kgs Output 1 Unit

Simple Average ` Per Unit Calculation

Raw Material 2kg. x ` 18.50	=	37.00	
Other Conversion Costs	=	6.00	
Total Cost	=	43.00	70
(+) Profit (30 on Sales	=	18.43	30
Selling Price	=	61.43	100

Illustration: 7

Assume a trading company with the following information in the first half of 20X7:

Jan 1	Beginning Inventory	50 units x 10	(at cost)
Feb 25	Purchase	100 units x 12	(at cost)
Mar 3	Sale	120 units x 20	(at selling price)
Mar 3	Cost of Sale	120 units x TBD	(at cost)
Apr 6	Purchase	60 units x 14	(at cost)
May 17	Sale	70 units x 25	(at selling price)
May 17	Cost of Sale	70 units x TBD	(at cost)

In our example, on March 3 the company sold 120 units. To calculate the cost of goods sold for the 120 units, we take the 50 units from the first layer (beginning inventory, 10 per unit) and 70 items from the second layer (purchased on February 25, 12 per unit).

Next, on May 17, additional 70 units were sold. The cost of goods sold for the 70 units is computed by adding the cost of 30 (i.e., 100 - 70) units remaining from the second layer (purchased on February 25, 12 per unit) and 40 units from the third layer (purchased on April 6, 14 per unit). The computation of the total cost of goods sold is as follows:

Solution

Example of FIFO Cost Flow Method Under Perpetual System

Date	Purchase					Cost of Goods Sold					Inventory						
	Units	x	Cost	=	Total	Units	x	Cost	=	Total	Units	x	Cost	=	Total		
Jan 1											50	x	10	=	500		
Feb 25	100	x	12	=	1,200						50	x	10	=	500		
										100	x	12	=	1,200			
Mar 3						50	x	10	=	500							
						70	x	12	=	840	30	x	12	=	360		
Apr 6	60	x	14	=	840						30	x	12	=	360		
										60	x	14	=	840			
May 17						30	x	12	=	360							
					40	x	14	=	560	20	x	14	=	280			
						Total Cogs				=	2,260	End. Inventory				=	280

The two preceding examples above show the computations of the cost of goods sold and the ending inventory assuming the perpetual inventory system. Let us move on to the periodic inventory system now.

Example of FIFO cost flow method under periodic system. Under the periodic system, inventory accounts are not affected when purchases and sales take place. Instead, the Inventory Purchases account is used. The amount of ending inventory is determined by a physical count of inventory on hand at period end. The cost of goods sold is computed by subtracting the amount of ending inventory from the goods available for sale.

Let us assume that the physical count at the end of the first half of 20X7 showed 20 units remaining on hand. The total amount of units sold is therefore 190 (210 - 20).

FIFO means first-in, first-out. So, we need to use the cost of inventories acquired first. Also note that the FIFO method does not require calculation of intermediate amounts of cost of goods sold and ending inventory balances. The cost of goods sold calculation for the 190 units is presented below:

Example of FIFO cost Flow Method Under Periodic System

From Beginning Inventory on Jan 1	50 units x 10 = 500
From Purchase on Feb 25	100 units x 12 = 1,200
From Purchase on Apr 6	40 units x 14 = 560
Total Cogs	2,260

Lower of cost or market rule definition and example So far we have been looking at methods used to determine inventory costs (more specifically, the cost of goods sold and the ending inventory). Once the cost of ending inventory is calculated, it is required to be compared with the current market value. Comparing the cost to market is the procedure for the lower of cost or market rule.

The market value is the amount that would have been paid to replace the merchandise.

Lower of cost or market rule states that if the market value of ending inventory is lower than the book value of such inventory, the resultant loss must be recognized in the current period.

The lower of cost or market rule can be applied to:

- (a) Each individual inventory item
- (b) Major classes or categories of inventory
- (c) Entire cost of all inventory items

For example, look at the table below:

Examples of the Lower of Cost or Market Rule

Item	Cost	Market Value	Lower of Cost or Market
A	500	520	500
B	650	590	590
C	50	50	50
D	12	13	12
Total	1,212	1,173	\$1,152

For individual item A, the cost is lower than the market value, so the lower of cost or market is the cost of 500. For B the market value is lower, so the lower of cost or market is the market value of 590. For item C both the cost and market value are the same, so there is no difference. For item D the cost is lower, so the lower of cost or market is the cost of 12.

As for the aggregate, the total cost of the four items is 1,212, and their total market value is 1,173. So, when applying the lower of cost or market rule to all inventory items in aggregate, the market value of 1,173 needs to be used to adjust the ending inventory balance.

If the market value of an item (or items in aggregate) is lower than its cost, the company has to reduce (write down) the ending inventory balance. For example, in our illustration the difference between the cost in aggregate and the total market value is 39 (i.e., 1,212 - 1,173). If the perpetual inventory system is used, the entry to record this reduction acts to decrease assets (Inventory) and equity (by increasing Cost of Goods Sold or Inventory Loss):

Illustration: 8

Journal Entry to Write-down Inventory Costs Under Perpetual System

Account Titles	Debit	Credit
Dr Cost of Goods Sold (Inventory Loss)	39	
Cr Inventory		39

The loss should be shown as an operating expense on the income statement. However, if the amount is immaterial, the loss can be included in the cost of goods sold.

Under periodic inventory system, the amount of ending inventory is automatically shown at the lower of cost or market. The cost of goods sold is computed as the difference between the cost of goods available for sale and the ending inventory. Thus, any decrease in the ending inventory balance due to the application of the lower of cost or market rule increases the cost of goods sold. Assume the following situation:

Illustration: 9

Example of the Lower of Cost or Market Rule Under Periodic System

	Before Applying Rule	After Applying Rule
Beginning Inventory	1,000	1,000
<i>Plus:</i> Purchases	2,300	2,300
Cost of Goods Available for Sale	3,300	3,300
<i>Less:</i> Ending Inventory	(500)	(450)
Cost of Goods Sold	2,800	2,850

Before application of the lower of cost or market rule, the ending inventory was 500. However, after performing a recalculation of the ending inventory by applying the lower of cost or market rule, the ending inventory was determined to be 450. The difference of 50 is included into the cost of goods sold for the period and no additional adjustment is necessary.

Cost of Goods Sold = Value of the Goods Sold

Cost of Goods Sold = Opening Stock + Purchases + Direct Expenses – Closing Stock – Stock Unused for Trading

Illustration: 10

Consider the following data relating to an organisation.

1. Opening Stock at the beginning of the accounting period, ` 20,000.
2. Purchases of goods/stock during the accounting period: ` 2,48,000.
3. Direct expenses incurred: ` 54,000.
4. Unsold stock at the end of the accounting period valued at ` 36,000.
5. Value of Stock used for other purposes ` 14,000.

Particulars	Amount	Amount
Opening Stock(+)		20,000
(a) Purchases (Cost Value)	2,48,000	
(b) Direct Expenses	<u>54,000</u>	<u>3,02,000</u>
Total Value of Goods(“)		3,22,000
(a) Closing Stock (Value)	36,000	
(b) Stock Unused for Trading	<u>14,000</u>	<u>50,000</u>
Cost of Goods Sold		2,72,000

The formula for calculating the value of Cost of Goods Sold based on the above calculations can be written as

$$\text{Gross Profit} = \text{Sales} - \text{Cost of Goods Sold}$$

To obtain the value of gross profit we need the figures of cost of goods sold and sales.

Dr		Goods Consumed A/c		Cr	
Particulars	Amount (in `)	Particulars	Amount (in `)		
To Opening Stock	20,000	By Goods Unused	14,000		
To Purchases	2,48,000	By Closing Stock	36,000		
To Direct Expenses	54,000	By Trading a/c	2,72,000		
	3,22,000		3,22,000		

The balance in the Goods Consumed a/c represents Cost of Goods sold. This account is closed by transferring the balance to the Trading a/c.

Dr		Trading a/c		Cr	
Particulars	Amount (in `)	Particulars	Amount (in `)		
To Goods Consumed	2,72,000	By Sales	3,80,000		
To Gross Profit	1,08,000				
	3,80,000		3,80,000		

Illustration: 11

Consider the following data relating to an organisation which started its operations on 28th December 2006:

- ◊ Opening Stock:: Nil;
- ◊ Purchases:: ` 1,20,000;
- ◊ Direct Expenses:: ` 30,000
- ◊ Sales:: Nil
- ◊ Stock used by the organisation internally ` 20,000 (Valued at Cost). Generally Sales are made by adding 25% profit to cost
- ◊ Closing Stock:: ?

The accounting period ends on 31st December 2006.

Value of Closing Stock with the Organisation	= Total Value of Stock “ Value of Stock used up internally = Purchases + Direct Expenses “ ` 20,000 = (` 1,20,000 + ` 30,000) “ ` 20,000 = ` 1,30,000
--	---

Sales value of the stock used within the organisation	= Cost + 25% of Cost
	= ` 20,000 + 25% of ` 20,000
	= ` 20,000 + ` 5,000
	= ` 25,000

Stock Used up Internally Recorded at Sales Value

Dr		Trading A/c		Cr	
Particulars (in `)	Amount (in `)	Amount	Particulars (in `)	Amount	Amount (in `)
To Purchases		1,20,000	By Sales		–
To Direct Exp.		30,000	By Stock used		25,000
To Gross Profit		5,000	By Closing Stock		1,30,000
		1,55,000			1,55,000

There is no commercial activity (no sales), there is no scope for earning profits. But the Trading a/c reveals a Gross Profit of ` 5,000 which is on account of the stock used up internally being recorded at sales value.

Such profit generation is inappropriate for the reason that in using up stock within the organisation, the organisation is not conducting a transaction with an outside party.

Thus to avoid profit generation in such cases, the stocks so used are to be valued at cost.

Stock Used up Internally Recorded at Cost

Dr		Trading A/c		Cr	
Particulars (in `)	Amount (in `)	Amount	Particulars (in `)	Amount	Amount (in `)
To Purchases		1,20,000	By Sales		–
To Direct Exp.		30,000	By Stock used		20,000
To Gross Profit		Nil	By Closing Stock		1,30,000
		1,50,000			1,50,000

The Trading a/c would reveal no profit when the stock used up internally is valued at cost.

Illustration: 12

Calculate the cost of goods sold and closing stock under weighted Average cost of inventory using:

- (a) Periodic System.
- (b) Perpetual System.

March	1	Stock in hand	500 units @ ` 9
Purchases:			
March	3		500 units @ ` 11
March	10		1,000 units @ ` 12
March	18		600 units @ ` 10
March	24		500 units @ ` 12
March	30		400 units @ ` 13
Issue:			
March	2		400 units
March	9		500 units
March	16		900 units
March	23		500 units
March	31		600 units

*(B.Com. – Adapted)***Solution****(a) Periodic System:**

Weighted Average Cost per unit

$$\begin{aligned}
 &= \frac{\text{Total Cost of Goods Available for Sale}}{\text{Total Number of Units Available for Sale}} \\
 &= \frac{(500 \times 9) + (500 \times 11) + (1,000 \times 12) + (600 \times 10) + (500 \times 12) + (400 \times 13)}{500 + 500 + 1,000 + 600 + 500 + 400} \\
 &= \frac{4,500 + 5,500 + 12,000 + 6,000 + 5,200}{3,500} \\
 &= \frac{39,200}{3,500} \\
 &= ` 11.20
 \end{aligned}$$

No. of units sold	= 400 + 500 + 900 + 500 + 600
	= 2,900 units
Cost of Goods sold	= units sold x Weighted Price per unit
	= 2900 x 11.20
	= ` 32,480.
No of units stock	= 3,500 – 2,900
	= 600 units
Value of stock	= 600 x 11.20
	= ` 6,720

(b) Perpetual System:

Date	Receipt			Issue			Balance		
	Units	Rate	Amount	Units	Rate	Amount	Units	Rate	Amount
March 1	–			–			500	9	4,500
March 2	–			400	9	3,600	100	9	900
March 3	500	11	5,500	–			600	10.67	6,402
March 9	–			500	10.67	5,333	100	10.67	1,067
March 10	1,000	12	12,000	–			1,100	11.88	13,068
March 16	–			900	11.88	10,691	200	11.88	2,376
March 18	600	10	6,000	–			800	10.47	8,376
March 23	–			500	10.47	5,235	300	10.47	3,141
March 24	500	12	6,000	–			800	11.43	9,144
March 30	400	13	5,200	–			1,200	11.95	14,340
March 31	–			600	11.95	7,170	600	11.95	7,170

Illustration: 13

Calculate the value of closing stock, cost sales according to FIFO and Weighted Average Method as on 31st March, 2001 using Periodic Inventory System.

March 1, 2001 Stock 5,000 units @ ` 8 per unit

March 7, 2001 Purchased 7,500 units @ ` 10 per unit

March 12, 2001 Purchased 8,500 units @ ` 12 per unit

March 21, 2001 Purchased 9,000 units @ ` 15 per unit

March 28, 2001 Purchased 12,000 units @ ` 11 per unit

The physical stock-taking completed on 31st March, 2001 revealed a closing stock of 3,500 units.

Assuming that sale price is @ ` 15 per unit, calculate the gross profit.

(B. Com., Delhi – Adapted)

Solution

Total cost of goods available for sale	= (5,000 x 8) + (7,500 x 10) + (8,500 x 12) + (9,000 x 15) + (12,000 x 11)
	= ` 4,84,000
Total No. of units	= 5,000 + 7,500 + 8,500 + 9,000 + 12,000
	= 42,000 units
Stock (in units)	= 3,500 units
No. of units sold	= 42,000 – 3,500
	= 38,500 units
Sales	= 38,500 x 15
	= ` 5,77,500

Cost of Goods Sold, Stock and Gross Profit:**FIFO:**

Closing Stock	= 3,500 x 11
	= ` 38,500
Cost of Goods sold	= Total Cost x Closing Stock
	= 4,84,000 – 38,500
	= ` 4,45,500
Gross Profit	= Sales – Cost of Goods Sold
	= 5,77,500 – 4,45,500
	= ` 1,32,000

Weighted Average:

Weighted Average Cost Per unit	= $\frac{\text{Total Cost}}{\text{Total Units}}$
	= $\frac{4,84,000}{42,000}$
	= 11.52
Closing Stock	= 3,500 x 11.52
	= ` 40,320
Cost of goods sold	= 4,84,000 – 40,320
	= ` 4,43,680
Gross Profit	= 5,77,500 – 4,43,680
	= ` 1,33,820

Valuation of Stock on the Date of Final Accounts (Stock Reconciliation)

Under Perpetual System, value of stock can be determined easily on the basis of stock record. But under periodic system, it becomes necessary to take the stock on the date of Balance Sheet. In practices, it is not possible to take stock on the date of Balance Sheet. There are two option available to a firm:

1. To suspend business activities entirely end do stock taking. In this case the stock on date of balance Sheet and physical stock taking will be the same.
2. To continue business actives and estimate the stock on the date of the balance Sheet by making adjustment regarding purchases, cost of goods sold, cost of return etc. during the inventory period. The effect of various transactions on flow of goods during the specific period is considered to decide the stock. While estimating the stock on the date of Balance Sheet it must be remembered that physical stock is the cost of goods in possession on that date. But the stock on the date of balance Sheet is to be determined on the basis of

Ownership of goods and not the possession of goods. Ownership is the sole criteria to decide whether a particular item is to be included or excluded. Hence, goods in transit, sale of goods on approval, branch stock, stock on consignment are included on the basis of ownership though the possession of goods not with the trader on the date of valuation.

Transfer of ownership may be decided on any one of the following bases:

1. Invoice Basis:

Purchase and sale is assumed to be completed on the date of invoice. Hence, date of invoice is important

2. Delivery Basis:

Transfer of ownership is assumed to take place on the date of delivery of goods

(i) If Stock is Taken Prior to the Date of Balance Sheet

Value of stock on the date of stock taking		xx
<i>Add:</i> Purchases during the period	xx	
<i>Add:</i> Cost of Sales Returns during the period	xx	
<i>Add:</i> Cost of Stock on Consignment with consignee, Stock with customers on sale or Return basis, Stock with branches.	xx	xx
<i>Less:</i> Cost of sales during the period	xx	
<i>Less:</i> Purchase returns during the period	xx	xx
Value of Stock on the Balance Sheet date		<u>xx</u>

Exhibit

Notes:

1. Sales should include normal sales only.
2. Exclude from sales goods on sale or return basis or hire purchase basis.
3. Deduct normal profit from sales to arrive at cost of goods sold.
4. Cost of goods sold should be ascertained separately when the goods are sold at a loss or at abnormal profit.

Illustration: 14

3. Sales was of ` 1,70,000. This includes goods worth ` 40,000 sent on approval. half of these were returned before 31st March. As regards remaining. no intimation was received.
4. Normally the firm sells goods on cost plus 25%. However, a lot of goods costing ` 30,000 was sold at ` 15,000.

Solution**Statement Showing the Value of Stock on 31.03.2002**

Particulars		
Stock on 23 rd March, 2002		
<i>Add:</i> Purchases during 23 rd and 31 st March (` 30,000 + 20,000 in transit)	50,000	
<i>Add:</i> Goods lying with consignee at cost (` 20,000 – ` 4,000)	<u>16,000</u>	<u>96,000</u>
		6,96,000
<i>Less:</i> Cost of goods sold during 23 rd March and 31 st March (Note 1)	1,08,000	
<i>Less:</i> Cost of Abnormal Sales	<u>30,000</u>	<u>1,38,000</u>
Value of stock on 31 st March, 2002		5,58,000

Working Notes:

1. Cost of goods sold during 23rd March, and 31st March, 2000:

Sales		1,70,000
<i>Less:</i> Sales of abnormal items	15,000	
<i>Less:</i> Sent on approval	<u>20,000</u>	<u>35,000</u>
		1,35,000
<i>Less:</i> Gross Profit @ 25% of cost i.e, 20% on sale		<u>27,000</u>
		<u>1,08,000</u>

Illustration: 15

Mr. Mukesh's financial year ends on 30th June 2012 but the actual physical stock is not taken until the following 8th July 2012 when it is ascertained at ` 7,425. You find that.

1. Sales are entered in the sale day book on the 'day' of dispatch and returns inwards in return inward book are received back.
2. Purchases are entered in purchases book as the invoice are received.
3. Sale between 1-8 July as per sales book and cash book are ` 8,600.
4. Purchases between 1-8 July as per purchases book are ` 660 but out of these goods amounting to ` 60 are not received till 8th July.
5. Goods purchases and invoiced before 30th June amounted to ` 500 out of which ` 350 worth of goods are received between 1-8 July and remaining goods after 8th July. Find of the value of stock as at 30th June, 2001 assuming that rate of profit is 1/3 on cost.

(B.Com Delhi and CA - Adapted)

Solution

Statement Showing the Value of Stock on 30.6.2012

Physical Stock on 8.7.2012	7,425
<i>Add:</i> Cost of goods sold during the period [8,600 – ¼ of ` 8,600]	6,450
	13,875
<i>Less:</i> Goods purchased and received during the period (660 – 60)	600
	13,275
<i>Add:</i> Goods invoiced before 30 th June but not included in physical Stock* (500 – 350)	150
Value of Stock on 30.6.2012	13,425

*Because purchases are recorded on the basis of date of invoice.

Illustration: 16

Moon Ltd. Keeps no stock records, but a physical of Stock is made at the end of the quarter and the valuation taken at cost. The Company's year ends on 30th September, 2002 and Draft Accounts have been prepared to that date. The Stock Inventory taken on 30th September, 2012 was, however, mislaid and you have been advised to value the Closing Stock as on 30th September, 2002 with the Stock figure as on 30th June, 2012 and some other information as available to you are:

1. The Cost of Stock on 30th June, 2012 as shown by the inventory was ` 80,000
2. On 30th June, Stock sheets showed the following discrepancies:
 - (a) A page total of ` 5,000 had been carried to the summary as ` 6,000
 - (b) The total of page had been Undercast by ` 200
3. Invoice of purchases entered in the purchase Book during the months from July to September, 2012. Totaled ` 70,000 of this ` 3,000 related to goods received prior to 30th June, 2012. Invoice entered in October 2012 relating to goods received in September 2012 totalled ` 4,000.
4. Sales invoiced to customer from July to September 2012 totalled ` 90,000. Of this, ` 5,000 Related to goods dispatched on or before 30th June, 2012. Goods dispatched to customers before 30th September, 2012 but invoice on October 2012 totalled ` 4,000.
5. During the final quarter, Credit notes at invoice value of ` 1,000 had been issued to customers in respect of goods returned during that period.
6. The Gross margin earned by the Company is 25% of cost.

You are required to prepare a statement showing the amount of cost as on 30th September, 2012.

(I.C.W.A. – Adapted)

Solution**Statement Showing the Value of Stock on 30.09.2002**

	`	`
Stock on 30.6.2012		80,000
<i>Add:</i> Error in casting	200	
<i>Add:</i> Purchases during 30.6.2012 and 30.9.012	<u>71,000</u>	<u>71,200</u>
		1,51,200
<i>Less:</i> Error in carry forward of page total	1,000	
<i>Less:</i> Adjusted cost of sales	<u>70,400</u>	<u>71,400</u>
Value of stock on 30.9.2012 (at cost)		<u>79,800</u>

(II) If Stock is Taken After the Date of Balance Sheet

The above format should be followed. The items added should be deducted and the items deducted should be added.

Statement Showing the Value of Stock on

	`	`
Stock on the later date		
<i>Add:</i> Sales during the period (at cost)		x
<i>Add:</i> Purchases Returns during the said period	x	
<i>Add:</i> Undercasting in Stock Sheet	x	
<i>Add:</i> Goods in transit	x	
<i>Less:</i> Purchases during the period	x	x
<i>Less:</i> Sales Return at cost during the period	x	
<i>Less:</i> Overcasting in Stock Sheet	x	
<i>Less:</i> Goods held on consignment basis	x	x
Stock on the date of Balance Sheet		<u>x</u>

Illustration: 17

TY Ltd. Conducts physical stock taking every every year at the end of the accounting year. Qwing to certain difficulties, it was not possible for it to conduct physical stock taking at the end of the accounting year ending 30th June, 2012. Physical stock was taken on 8th July, 2012 when it was valued at ` 34,000.

The following transaction took place during 1st July to 8th July, 2012.

1. Net sales during the period were ` 9,340. These goods were sold at the usual rate of gross profit of 25% on cost except goods, which realize ` 840 on the basis of 20% profit on cost.

2. Purchases during the period were ` 7,500 of which ` 800 worth of goods were delivered to the company only on 10th July, 2012.
3. Sales returns during the period were ` 1,500 of which 50% were out of the sales at 20% gross profit mentioned above.
4. On 5th July, 2012 goods worth ` 5,000 were received, which were to be sold on consignment basis.

You are required to prepare a statement showing clearly the value of the stock to be taken into account in TY Ltd.' Final accounts for the year ended 30th June, 2012.

(CA Ended – Adapted)

Solution

Statement showing the value of Stock on 30.06.2012

	`	`
Stock on 8 th July, 2012		34,000
<i>Add:</i> Cost of goods sold during 1 st July and 8 th July, 2012		<u>7,500</u> 41,500
<i>Less:</i> Cost of goods returned during 1 st July and 8 th July, 2012	1,225	
<i>Less:</i> Purchased during 1 st July & 8 th July, 2012 ($\text{` } 7,500 - \text{` } 800$)	6,700	
<i>Less:</i> Goods held on consignment	5,000	<u>12,925</u>
Stock on 30 th June, 2012		<u>28,575</u>

Working Notes

1. Cost of Goods Sold:

	`	`
(a) Sales at cost plus 25% ($9,340 - 840$)	8,500	
<i>Less:</i> 20% Profit on Sales	<u>1,700</u>	6,800
(b) Sale at cost plus 20%	840	
<i>Less:</i> 16.67% Profit on sale	<u>140</u>	<u>700</u>
		<u>7,500</u>

2. Cost of Goods Returned:

	`	`
(a) Selling Price	750	
<i>Less:</i> Profit 20% on Sales	<u>150</u>	600
(b) Selling Price	750	
<i>Less:</i> Profit 16.67% on Sale	<u>125</u>	<u>625</u>
		<u>1,225</u>

Illustration: 18

X who was closing his books on 31st March, 2011 failed to take the actual Stock, which he did only on 19th April, 2011, when it was ascertained by him to be worth ₹ 25,000.

It was found that sales are entered in the sales book on the same day of dispatch and return inwards in the returns book as and when the goods are received back. Purchases are entered in the purchases day book once the invoices are received.

It was found that sales between 31st March, 2011 and 9th April, 2011 as per the sales day book are ₹ 1,720. Purchase between 31st March 2011 and 9th April, 2011 as per purchases day book are 1,200 out of these, goods amounting to ₹ 50 were not received until after the stock was taken.

Goods invoiced during the month of March 2011 but goods received only on 4th April, 2011 amounted to ₹ 100 rate of gross profit is $33\frac{1}{3}\%$ on cost.

Ascertain the value of physical stock as on 31st March, 2011.

(CA – Adapted)

Solution**Statement Showing the Value of Stock on 31.03.2011**

	₹
Stock on 9.4.2011	25,000
<i>Add:</i> Cost of goods sold during the period Sale	1,720
<i>Less:</i> Profit (25% of sales)	<u>430</u>
	26,290
<i>Less:</i> Goods Purchased and received during the period (1200 – 50)	1150
Value of stock on 31.3.2011	26,220
<i>Less:</i> Goods purchased before 31.3.2011 but delivered on 4.4.2001	100
Value of Physical Stock on 31.3.2011	26,120

Illustration: 19

Closing stock is valued by Sudharshan Stores on generally accepted accounting principle. Stock taking for year ended 30th September, 2011 was completed by 10th October next, the valuation of which showed a stock figure of ₹ 1,67,500 at cost on the completion date.

After the end of the accounting year and till the date completion of stock taking, sales for the next year were made for ₹ 6,875, profit margin being $33\frac{1}{3}\%$ per cent cost. Purchases for the next year included in the stock amounted to ₹ 9,000 at cost less trade discount 10%. During this period goods were added to stock to the mark up price of ₹ 300 in respect of sale returns.

After stock taking it was found that there were certain very old slow moving items costing ₹ 1,125 which should be taken at ₹ 525 to ensure disposal to an interested customer.

Due to heavy floods, certain goods costing ` 1,550 were received from the supplier beyond the delivery date of the customer. As a result, the customer refused to take delivery and net realizable value of goods are estimated to be ` 1,250 on 30th September, 2011.

Compute the value of stock for inclusion in the final accounts for the year ended 30th September, 2011

(CA – Adapted)

Solution

Statement Showing the Value of Stock on 31.09.2011

	`
Value of Stock as on October 10, 2011	1,67,500
<i>Add:</i> Cost of sales during the period 30 th September to 10 th October (6,875 – 1,719)	5,156
<i>Less:</i> Purchases for the next period (net) 8,100	
Sales Returns at cost (300 – 75) 225	
Loss on revaluation of slow moving stock 600	
Reduction in value on account of default <u>300</u>	9,225
Value of stock on September 30, 2011	1,63,431

Illustration: 20

Raja makes up his annual accounts to 31st December each year. He was unable to take stock of physical inventory till 9th January, 2011 on which date the physical stock at cost was valued at ` 75,200.

You are required to ascertain the value of physical stock at cost on 31st January, 2011 to 9th January

1. Purchases of goods amounted to ` 25,600 of which goods worth ` 4,700 had been received on 28th December, 2011 and 2010 and goods worth ` 5,900 had been received on 12th January, 2011.
2. Sales of goods amounted to ` 38,400 of which goods of a sale value of ` 3,600 had not been delivered at the time of verification and goods of a sale value of 6,000 had been delivered on 29th December, 2010.
3. Sales return amounted to ` 1,800, which included a return of ` 720 relating to the goods sold and delivered between 1st January 2010 to 9th January 2011.
4. A sub-total of ` 12,000 on one of the stock sheets had been carried to the summary of stock sheets as ` 21,000.
5. In respect of goods costing ` 4,000 received prior to 31st December, 2010 invoice had not been received upto the date of verification of stock.
6. The rate of gross profit was 20% on the cost price.

(I.C.W.A. – Adapted)

Solution**Statement Showing the Value of Stock on 31.12.2000**

Stock as on 9 th January, 2011		75,200
<i>Add:</i> Cost of goods sold and dispatched during 1 st and 9 th January, 2011 (Note 1)		24,000
		99,200
<i>Less:</i> Goods actually received during 1 st and 9 th January, 2011 (Note 2)	15,000	
<i>Less:</i> Cost of goods returned	900	
<i>Less:</i> Wrong carry forward (` 21,000)	9,000	24,900
		74,300

Working Notes**1. Cost of Goods Sold:**

Sales 38,400	
<i>Less:</i> Goods not dispatched	3,600
	<u>34,800</u>
<i>Less:</i> Goods dispatched on 29th December, 2010	6,000
	<u>28,800</u>
<i>Less:</i> Gross Profit 20% on cost, i.e 16.67% on sale	4,000
	<u>24,000</u>

2. Goods Actually Received During 1st and 9th January, 2011:

Purchases	25,600
<i>Less:</i> Goods received on 28th December, 2000	4,700
	<u>20,900</u>
<i>Less:</i> Goods received on 12th January, 2001	5,900
	<u>15,000</u>

3. Cost of Goods Returned:

Return	1,800
<i>Less:</i> Return from Sale of 1st and 9th January	720
	<u>1,080</u>
<i>Less:</i> Gross profit 20% on Cost	180
	<u>900</u>

Illustration: 21

Krishna Udyog Limited makes up its accounts to December 31st each year. The company was unable to take stock by physical inventory till 14th January, 2011 on which date the stock at cost was valued at ` 1,85,000. It was, therefore, necessary to estimate the value of stock in hand as on 31st December,2010.

You ascertain the following facts regarding the period January 1 to January 14, 2011.

1. Purchases totaled ` 48,000 and included:
 - (a) ` 5,000 in respect of goods received in December, 2010.
 - (b) ` 6,000 in respect of goods received on 19th January, 2011.
 - (c) ` 2,000 in respect of goods received but returned to suppliers on 7th January 2011 for which no credit note has been received or passed through the books.
2. Sales totaled ` 60,000 and included:
 - (a) ` 1,500 in respect of goods, which left the warehouse on 28th December, 2010.
 - (b) ` 2,800 in respect of goods, which were not dispatched until 16th January, 2011.
 - (c) ` 750 in respect of goods invoiced and dispatched on 10th January, 2011 but returned by the customers on January 12, for which no credit note had been passed but which were, in fact, included in the stock taken on 14th January, 2011.
3. Other returns to suppliers totaled ` 1,400 and other returns by customer were ` 450.
4. The rate of gross profit was 20% on the selling price with the exception of an isolated purchases on 7th January, 2000 of 100 similar articles which has cost ` 11,000. Of these articles, 50 were sold on 7th January, 2011 for ` 6,500 and the remainder had been included at cost in the stock taken on 14th January, 2011.

Prepare a statement showing the estimated value of stock held on 31st December,2010 at cost.

(C.A. – Adapted)

Solution

Statement Showing the Value of Stock on 31.12.2001.

	`	`
Stock on 14 th January, 2011		1,85,000
<i>Add:</i> Cost of goods sold during 1 st and 14 th January, 2011	45,460	
<i>Add:</i> Purchases returns during 1 st and 14 th January, 2011	1,400	46,860
		2,31,860
<i>Less:</i> Purchases during 1 st and 14 th January, 2011	40,000	
<i>Less:</i> Cost of goods returns during 1 st and 14 th January, 2011 (` 450 – 90)	360	40,360
Value of stock on 31 st December, 2010		1,91,500

Working Notes**1. Cost of Goods Sold:**

Sales during 1st and 14th January,		60,000	
<i>Less:</i> Goods not dispatched	2,800		
<i>Less:</i> Returned on 12th January,	<u>750</u>	<u>3,550</u>	
		56,450	
<i>Less:</i> Sales of isolated purchases		<u>6,500</u>	
Sales of normal item at a profit of 20%		49,950	
<i>Less:</i> Gross profit 20% on sales		<u>9,990</u>	
		39,960	
<i>Add:</i> Cost of abnormal 50 articles		<u>5,500</u>	
		<u>45,460</u>	

2. Calculation of Purchases:

Purchases as given		48,000	
<i>Less:</i> Goods received on 19th January, 2010		<u>6,000</u>	
		42,000	
<i>Less:</i> Goods returned on 7th January		<u>2,000</u>	
		<u>40,000</u>	

3. Since the purchases of ` 48,000 included ` 5,000 in respect of goods received in December 2000 we assume that the entry in respect of ` 5,000 must have been made during 1st January and 14th January, 2011. So it should be treated as purchase of 2011 and it should be deduced from ` 1,85,000.

Exercises**Problem 1**

From the following balances, prepare departmental trading and profit and loss account for the year ended on 31-12-2008.

Particulars	Department P (₹)	Department Q (₹)	Total (₹)
Opening stock	37,500	35,000	72,500
Purchases	87,500	75,000	1,62,500
Sales	1,50,000	1,25,000	2,75,000
Wages	15,000	10,000	25,000

Rent, rates, taxes and insurance			23,475
Salaries			7,750
Lighting and heating			5,250
Discount allowed			5,500
Discount received			1,625
Advertising			9,200
Carriage inwards			5,850
Furniture and fittings			12,500

The following information is also provided:

- (a) Internal transfer of goods from departments P to department Q ` 5,000.
- (b) The items rent, rates and insurance, lighting and heating, salaries and carriage inward to be apportioned 40% department P and 60% department Q.
- (c) Advertising to be apportioned equally.
- (d) Discount allowed and discount received are apportioned on the basis of departmental sales and purchases.
- (e) Depreciation at 10% p.a. on furniture and fittings to be charged $\frac{3}{4}$ to department P and $\frac{1}{4}$ to departmental Q.
- (e) Stock as at 31st December 2008: Department P ` 42,500 department Q ` 37,500.

Problem 2

From the following particulars prepare trading and profit and loss account of he two departments — computers and television for the year ended 31-12-2009.

Particular	Computers (`)	Television (`)	Total (`)
Opening stock	45,000	30,000	75,000
Purchases	2,70,000	1,80,000	4,50,000
Carriage inward			6,000
Salaries	24,000	21,000	45,000
Sales	3,60,000	2,40,000	6,00,000
Purchase returns	3,000	2,000	5,000
Discount received			4,500
General expenses			30,000
Rent and rates			15,000
Advertising			30,000
Discount allowed			4,500
Insurance			3500
Selling and distribution			1500

The further information is relevant:

1. General expenses are to be allocated equally.
2. The area occupied is computer 3/5 and television 2/5.
3. Insurance is not allocated to any particular department.

Problem 3

Prepare departmental trading and profit and loss account from the following particulars:

Particulars	Dept. P. (₹)	Dept. Q. (₹)	Dept. R. (₹)	Total (₹)
Opening stock	60,000	45,000	40,000	
Purchases	2,25,000	1,50,000	75,000	
Wages	75,000	60,000	50,000	
Closing stock	1,10,000	80,000	70,000	
Sales	4,00,000	3,20,000	1,60,000	
Salaries	32,500	17,500	22,500	
Motor van expenses				11,000
Advertising				16,500
Travelling expenses				8,250
Insurance				11,750
Carriage inwards				30,000
Discount received				9,000
Bad debts				2,750
Discount allowed				5,500
Rent				17,500
Accountancy charges				4,500

Additional information:

- (a) The insurance premium is on a comprehensive policy and cannot be allocated among the department.
- (b) The motor van expenses are to be divided equally between departments Q and R.
- (c) The floor space occupied by the three departments P, Q and R is the ratio of 3:2:2. Other expenses or incomes are to be allocated on suitable basis.
- (d) Other expenses or income are to be allocated equally.

Problem 4

A firm has two departments, L and M. From the following figures, prepare the departmental trading and profit and loss account for the year ended 31st December.

Particulars	Department L (₹)	Department M (₹)
Opening stock	40,000	50,000
Purchases	1,50,000	1,00,000
Sales	2,50,000	1,50,000
Salaries	16,800	12,000

Other Expenses	₹
General salaries	20,000
Carriage inward	10,000
Carriage outward	16,000
Advertisement	12,000
Rent and rates	18,000
Interest on bank loan	5,000
Lighting for sales department	2,400
Discount received	3,000
Insurance	2,000

Additional Information:

- (a) Area occupied by the two departments is in the ratio of 2:1.
- (b) General salaries are to be allocated equally.
- (c) Insurance premium is for a comprehensive policy; hence its allocation is inconvenient.
- (d) Closing stock was L: ₹ 36,000 and M: ₹ 40,000

Exercise Problems

1. Theory Question

- 1. What is the importance of proper valuation of stock?
- 2. Describe the various methods of valuation of stock.
- 3. Distinguish between Weighted Average and FIFO methods of valuation of stock. Explain with illustration.
- 4. What adjustments are required to be made to ascertain the value of stock if stock is not done on the date of balance sheet?

2. Practical Problems

- 1. Following is the record of transactions regarding purchases and sales:

2001

January	Purchased	100 units	@ ` 4
February	Purchased	200 units	@ ` 4.5
March	Purchased	300 units	@ ` 5
April	Sold	70 units	@ ` 6
May	Sold	150	@ ` 7.50

Required:

(a) Prepare stock register as per the following methods:

(i) FIFO

(ii) Weighted Average.

(b) Find out cost of goods sold.

2. Keep stock record on FIFO. Weighted Average basis from the following transactions:

Purchases:

2001

January	1	500	units	@ ` 18
	5	700	units	@ ` 20
	9	900	units	@ ` 18
	15	300	units	@ ` 25
	25	200	units	@ ` 20
	31	500	units	@ ` 25

2001

January	2	200	units	@ ` 22
	7	500	units	@ ` 25
	11	400	units	@ ` 21
	18	800	units	@ ` 28
	27	500	units	@ ` 25

Also find out cost of goods sold and the profit.

3. The purchases and issues of materials of Alpha Industries Ltd. are as follows:

	Units	Unit Cost (`)
Purchased	100	1
Purchased	400	1.50
Issued	200	
Purchased	300	1.25
Issued	300	

What is the value of the ending inventory under the following methods:

- (a) Weighted Average Price Method.
 - (b) First in First out Method.
4. The following transactions took place in I of a material.

Date	Receipt Quantity	Rate	Issue Quantity
2.3.2001	200	2	
10.3.2001	300	2.40	
15.3.2001	–	–	250
18.3.2001	250	2.60	–
20.3.2001	–	–	300

Prepare a stock register as per Weighted Average Method.

5. Find the value of closing stock, under FIFO, and Weighted Average Price Method, from the following information: (under both the systems)

2001

January	1	Opening Stock	700	units	@ ` 5
	4	Sales	300	units	
	8	Purchases	900	units	@ ` 6
	10	Sales	500	units	
	11	Sales	100	units	
	16	Purchases	800	units	@ ` 6.50
	18	Sales	400	units	
	23	Purchases	1,100	units	@ ` 7.00
	29	Sales	600	units	

The market value of closing stock on 31st January, 2001; was ` 6.50.

6. The following particulars have been extracted in respect of material X. Prepare a Stores Ledger Account showing the receipts and issues, pricing the materials issued in the basis of Weighted Average (under both the systems).

Receipts:

2001

October	1	Opening Stock	200	units	at ` 3.50 per unit
	3	Purchased	300	units	at ` 4.00 per unit
	13	Purchased	900	units	at ` 4.30 per unit
	23	Purchased	600	units	at ` 3.80 per unit

Issues:

2001

October	5	Issued	400	units
	15	Issued	600	units
	25	Issued	600	units

[Ans. Issue Price Rate 5th, 15th, 25th, Closing Stock Weighted Average 3.80, 4.25, 3.98, 400 units ₹ 1,592]

7. From the following transactions, prepare separately the Stores Ledger Accounts, using the following pricing methods: FIFO

January	1	Opening Balance	100	units	@ ₹ 5 each
January	5	Received	500	units	@ ₹ 6 each
January	20	Issued	300	units	
February	5	Issued	200	units	
February	6	Received	600	units	@ ₹ 5 each
March	10	Issued	300	units	
March	12	Issued	250	units	

[Ans: 150 units @ ₹ 5 = ₹ 750]

8. At the beginning of October 2000 the Bangalore Tin Co. had 10,000 lbs. Of tin @ ₹ 2 per lb. Further purchases were made during the month as follows:

October	4	2,000 lbs.	@ ₹ 2.50 per lb.
	10	6,000 lbs.	@ 2.00 per lb.
	20	10,000 lbs	@ ₹ 3.50 per lb.

The issues to manufacture were as follows:

October	12	16,000 lbs.
	22	10,000 lbs.

Write the stores ledger cards with the above the transactions based in both the FIFO. What will be the value of the value of the closing stock in each case?

(Ans. FIFO: 2,000 units – ₹ 7,000)

9. Prepare a Stores Ledger Account from the following transactions assuming that issue of stores have been made on the principle of “First In First Out”:

2001

January	2	Purchased	2000	units at ₹ 4.00 per unit
January	20	Purchased	250	units at ₹ 5.00 per unit
February	5	Issued	1000	units
February	10	Purchased	3000	units at ₹ 6.00 per unit

February	12	Issued	2000	units
March	2	Issued	500	units
March	15	Purchased	2250	units at 5.50 per unit
March	20	Issued	1500	units

(Ans. FIFO Stock: 1,500 units at ` 5.50 = ` 8,250)

10. Prepare a Stores Ledger Account from the following information for the month of December 2000 on the basis of FIFO Method:

2000

December	3	Opening Balance	200 kg	at ` 20 per kg.
December	4	Issue	100 kg.	
December	10	Issue	50 kg	
December	18	Purchases	300 kg	at ` 18 per kg.
December	20	Issue	300 kg	
December	28	Purchased	50 kg	at ` 15 per kg
December	30	Issue	0 kg.	
December	30	Received back from completed job	5 kg.	

(Previously issued at ` 20 per kg)

(Ans. Stock 5kg returned to stores valued at ` 20)

11. The following are the transactions in respect of material x for the month of October 2001.

2001

October		Opening Balance	400	units at ` 2.90 per unit
	5	Purchased	500	units at ` 3 per unit
	10	Issued	700	units
	15	Purchased	700	units at ` 3.10 per unit
	20	Issued	800	units
	25	Purchases	400	units at ` 3.20 per unit
	30	Issued	500	units

Indicate at what price each issue must be made if based on Weighted Average Method.

(Ans. ` 2.955; ` 3.057; ` 3.153)

12. Prepare a Stores Ledger from the following transactions adopting the 'Weighted Average Method' of pricing out issues.

2001

June	1	Opening Balance	100 units	at. ` 3 per unit
June	5	Issued to production	4 units	
June	7	Purchased	96 units	at ` 4 per unit

June	9	Issued	40 units to production
June	19	Purchased	152 units at ` 3 per
June	24	Received back into stores	38 units out of 40 units issued on 9th June, 1982.
June	27	Issued to production	20 units.

(Ans. 322 units, ` 1.056, Rates ` 3, ` 3.5, ` 3.277)

13. With the help of the following information, prepare the Stores Ledger Card based on the Weighted Average Method of pricing issues: (under both the systems)

September	1	Opening Balance	24,000 kg.	@ 7,500 per tonne
	1	Purchased	44,000 kg.	@ ` 7,600 per tonne
	1	Issue	10,000 kg.	
	5	Issue	16,000 kg.	
	12	Issue	24,000 kg.	
	13	Purchase	10,000 kg.	@ ` 7,800 per tonne
	18	Issue	20,000 kg.	
	22	Purchase	50,000 kg.	@ ` 8,000 per tonne
	28	Issue	30,000 kg.	
	30	Issue	22,000 kg.	

(Ans. Closing Stock 2,000 kg. @ ` 7,974)

14. The following particulars relate to receipts and issues of material during March 2001.

March	4	Received	500	units @ ` 2.000 each
	18	Received	350	units @ ` 2.10 each
	19	Issued	600	units
	24	Received	600	units @ ` 2.20 each
	25	Issued	450	units
	26	Received	500	units @ ` 2.30 each
	28	Issued	510	units
	20	Issued	100	units

Prepare a Store Ledger Account on the basis of Weighted Average Price Method

(Ans 290 units @ ` 2.2348)

15. You are presented with the following information by Sphinx Engineering Co. relating to the first week of September 2001.

Materials: The transactions in connection with the materials are as follows:

Days	Units	Receipts Rate per unit (₹)	Issued Units
1st	40	15.00	
2nd	20	16.50	
3rd			30
4th	50	14.30	
5th			20
6th			40

Calculate the cost of materials issued under FIFO method and Weighted Average method of issue of materials.

(Ans. FIFO ₹ 1,359, Weighted Average Method ₹ 1,350)

16. The following particulars relate to receipts and issues of a material during March 2001.

2001

March	1	Received	500 units	@ ₹ 2.00 each
	18	Received	350 units	@ ₹ 2.10 each
	19	Issued	600 units	
	24	Received	600 units	@ ₹ 2.20 each
	25	Issued	450 units	
	26	Received	500 units	@ ₹ 2.30 each
	28	Issued	510 units	
	30	Issued	100 units	

Prepare a Stores Ledger Account on the basis of Weighted Average Price Method.

(Ans. 290 units ₹ 649; Issue Rate: ₹ 2,041; ₹ 2,153; ₹ 2,234)

17. Using the information given, draft Stores Ledger Records showing quantities and values of receipts, issues and balance in hand under the following method of pricing stores issues:

Weighted Average Price.

January	1	Balance in hand	1,000 units	₹ 1 each
January	15	Received	3,000 units costing	₹ 3,300
February	12	Received	2,000 units costing	₹ 2,400
January	20	Issued	2,000 units	
February	27	Issued	3,400 units	

(Ans. 600 units ₹ 683; Issue rates ₹ 1.075 and ₹ 1.1375)

18. Enter the following transactions in the stores Ledger of Y material using the FIFO Method.
2000

January	1	Balance 250 units @ ` 10 unit
	3	Issued 50 units on M.R. No 61
	6	Received 800 units vide G.R. No. 13 @ ` 11 per unit
	7	Issued 300 units on M.R. No. 63
	8	Returned to stores 20 units on M.R. No. 6
	12	Received 300 units per G.R.No. 15 @ ` 12 per unit
	15	Issued 320 units M.R. No. 83
	18	Received 100 unit, vide G.R.Note No. 77 @ ` 12 per unit
	20	Issued 120 units M.R.No. 102
	23	Returned to vendors 40 units from G.R.No.77 received on 18th instant
	26	Received 200 units on G.R.No 96 @ 10 per unit
	28	Fright paid on purchases (vide G.R. No.96) ` 50
	30	Issued 250 units on M.R. No. 113

Note: M.R. = Material Requisition

G.R. Note = Goods Received Note

(P.U.)

(Ans. FIFO $340 \times 12.00 = ` 4,080$; $200 \times 12.50 = ` 2,500$)

19. From the following details find out closing stock as per FIFO Method:

Purchases:

Date	Purchases Units	Price Per Unit `
4.11.2000	20	15
17.11.2000	30	14
2.12.2000	40	14.50
30.12.2000	50	13.00

Sales:

Date	Sales (Units)	Selling Price Per Unit `
20.11.2000	25	20
5.12.2000	40	21
10.12.2000	10	18
31.12.2000	45	15

On 20th December, 2000; two units sold on 10th December, 2000 were returned by the customers.
On 29th December, 2000; one unit was damaged and it had to be discarded.

Also calculate profit.

20. Sumit Ltd. Has purchased and issued the materials in the following order:

2001

August	1	Purchases	300 units	₹ 2 per unit
	4	Purchases	600 units	₹ 4 per unit
	6	Issued	500 units	
	10	Purchases	700 units	₹ 4 per unit
	15	Issues	800 units	
	20	Purchases	300 units	₹ .5 per unit
	23	Issues	100 units	

Ascertain the quantity of closing stock as on 31st August, 2001 and state what will be the value under the following methods:

- (a) First In First Out Method.
 - (b) Weighted Average Method under Physical Inventory Method and Perpetual Inventory Method.
21. Determine the value of stock to be taken for Balance Sheet as on 31st March, 2001 from the following information:

The stock was physically verified on 23rd March, 2001 and was valued at ₹ 6,00,000. Between 23rd March, 2001 and 31st March, 2001; the following transactions had taken place:

- (a) Purchases ₹ 50,000, of this goods worth ₹ 20,000 were delivered on 5th April, 2001.
- (b) Out of goods sent on consignment, goods worth ₹ 30,000 (at cost) were unsold.
- (c) Sales were ₹ 1,70,000. These includes goods worth ₹ 40,000 sent on approval. Half of these were returned before 31st March as regards remaining no intimation is received.
- (d) Normally firm sells goods on cost + 25%. However, one lot of goods costing ₹ 30,000 was sold for ₹ 15,000

(ICWA –Adapted)

(Ans. 5,58,000)

22. Determine the value of stock on 31st December, 2001 from the following details:

- (a) The physical stock taking completed on 25th December, 2001 revealed stock valued at ₹ 2,00,000.
- (b) Purchases between 26-31 December amounted to ₹ 15,000 out of which goods worth ₹ 5,000 were delivered on 7th January, 2002.
- (c) On 31st December, 2001; goods costing ₹ 10,000 lying with consignee remained unsold.
- (d) Sales during the intervening period amounted to ₹ 50,000. Out of which goods worth ₹ 20,000 were sold on approval. Half of the goods sold on approval were returned before 31st December, 2001 and as regards the remaining half, no intimation was received.

- (e) The goods are sold at a profit of 20% of selling price. However, in item costing ₹ 10,000 was sold at a loss of 50%.

(ICWA - Modified)

(Ans. ₹ 19,500)

23. X Ltd. keeps no running stock records but a physical inventory of stock is made at the end of each quarter and evaluated at cost. The company's year ends on 30th September, 2001 and draft accounts have been prepared to that date. The stock inventory taken on 30th September, 2001. The gross profit earned by company is 20% of cost.

During year audit you discovered the following:

- (a) The cost of the stock on 30th June, 2001 as show by inventory was ₹ 40,525.
- (b) On 30th June, 2001; stock sheets showed the following discrepancies:
- (i) A page total of ₹ 5,059 had been carried to the summary as ₹ 5,509
 - (ii) The total of a page had been under cast by ₹ 98.
 - (iii) 100 items, which had cost ₹ 5 each, had been taken at 25 paise each.
- (c) Invoice for purchases entered in the Purchases Book during the month of July, August and September, 2001 totaled ₹ 38,560. Of this total, ₹ 2,800 related to goods received on or prior to 30th June, 2001. Invoices entered in October, 2001 relating to goods received in September, 2001 totaled ₹ 3,700.
- (d) Sales invoiced to customers in July, August and September, 2001 totaled ₹ 51,073. Of this total, ₹ 3,824 related to goods dispatched on or before 30th June, 2001. Goods dispatched to customers before 30th September, 2001 but invoiced in October 2001 totaled ₹ 5,241.
- (e) During the final quarter of the company's year, credit note at invoiced value of ₹ 1,280 had been issued to customers in respect if goods returned during that period.

You are required to prepare a statement showing the amount of the stock at cost as on 30th September, 2001.

(CA – Adapted)

(Ans. ₹ 39,140)

24. On account of unavoidable circumstances. M/s Mahesh Electrical could not do stock-taking on 31st December, 2001. However, the stock was taken on 10th January, 2002.

The following are details of transactions from January 1 to 10 on which day inventory was taken:

(a) Purchases in January up to 10	45,000
Goods received after 10	5,000
Purchase returns	3,000
(b) Purchases include special items for	11,000
(c) Sales	80,000
Sales Returns	2,000
Sale of Goods invoiced but delivered after	108,000
(d) Sales include half the quantity of special item purchased for Balance left in stock	6,600
(e) Gross Profit Ratio 25%. Inventory taken on 10 January	1,75,000

Find out the value of stock as on 31st December, 2001.

(CA.- Adapted)

(Ans. ` 1,91,050)

25. The Financial year of X ends on 31st March, 2001 but the stock in hand was physically verified only on 7th April, 2001.

You are required to determine the value of closing stock (at cost) as at 31st March, 2001 from the following information:

- (a) The stock (valued at cost) as verified on 7th April, 2001 was ` 15,000.
- (b) Sales have been entered in the sales day book only after the dispatch of goods and sales returns only on receipt of goods.
- (c) Purchases have been entered in the purchase day book on receipt of the purchase invoice irrespective of the date of receipt of goods.
- (d) Sales as per the sales day book for the period 1st April, 2001 to 7th April, 2001 (before the actual verification) amounted to ` 6,000 of which goods of the sale value of ` 1,000 had not been delivered at the time of verification.
- (e) Purchases as per the purchases day book for the period from 1st April, 2001 to 7th April, 2001 (before the actual verification) amounted to ` 6000 of which goods for purchases of ` 1,500 had not been received at the date of verification and goods for purchases of ` 2,000 had been received prior to 31st March, 2001.
- (f) In respect of goods costing ` 5,000 received prior to 31st March, 2001, invoices had not been received upto the date of verification of stocks.
- (g) The gross profit is 20% on sales.

(B. Co. - Adapted)

(Ans. ` 9,500)

26. A company closed accounts on 31st December each year. It could not complete the physical verification of stock on 31st December, 2001; which continued upto 7th January, 2002. The stock as disclosed by the books was ₹ 2,00,000. The following facts came to notice during physical verification:
- (a) Goods received on consignment amounting to ₹ 10,000 were included in stock.
 - (b) Sales from 1st January to 7th January, 2002 amounted to ₹ 21,500 and included the following:
 - (i) Goods sent to consignment: ₹ 12,500 at invoice price, which is made up of cost plus 25%.
 - (ii) Goods sent to branch at invoice price ₹ 4,200. Invoice price is calculated at a profit of $\frac{1}{6}$ th of the sale.
 - (iii) Other sales are at a profit of $\frac{1}{3}$ rd of cost.
 - (iv) Goods sold for ₹ 800 at a loss of 20% of cost.
 - (c) Goods amounting to ₹ 18,000 have been received in the stores before 31st December, 2001 but passed through the books on 6th January, 2002.
 - (d) Invoices were issued for ₹ 2,8000 on 1st January, 2002: but goods had not been delivered till 7th January, 2002. Determine the value of stocks to be taken for the our pose of preparing the final accounts of the company for the year ended on 31st December, 2001.

(ICWA - Adapted)

(Ans. ₹ 1,91,400)

27. X Closed his books of account for the year on 31st March, 2001. Due to certain difficulties, he could not conduct stock taking on that date. Actual stock taking was done on 7th April, 2001 when goods valued at ₹ 34,500 were found present in the god owns. The following transactions had taken place during the period from 1st April, 2001 to 7th April, 2001:
- (a) Sales during the peried were ₹ 10,590. These goods were sold at the usual gross profit of 25% on cost except goods, which realized ₹ 840 on the basis of 20% profit on cost.
 - (b) Purchases during the period were ₹ 8,300 of which ₹ 1,180 worth of goods were delivered to Karam Chand only on Aril, 2001.
 - (c) Sales return during the period were ₹ 600. Out of it ₹ 300 worth of returns were out of the sales made at 20% gross profit mentioned above.

Prepare a statement showing clearly the value of stock on 31st March, 2001 to be shown in the final accounts prepared by X.

(B. Com. Delhi)

(Ans. ₹ 35,390)

28. X Limited prepares accounts on 31st March each year. On 31st March, 2001, its stock-taking could not be undertaken until 3 April, 2001 on which date the stock valued at cost amounted to ₹ 2,40,000.

An examination of inventories and related financial records disclosed that between 1st and 3rd April, 2001.

- (a) Sales totalled ` 40,000 including:
 - (i) ` 2,000 in respect of goods, which left the warehouse on 29th March, 2001 and
 - (ii) ` 4,000 in respect of goods not delivered until 12th April, 2001.

The rate of gross profit to sales was 30%.

- (b) Returns from customers totalled ` 6,000.
- (c) Purchases totalled ` 18,000; which included:
 - (i) ` 6,000 for goods received in March 2001 and
 - (ii) ` 3,000 for goods received on 10th April, 2001.
- (d) Returns to suppliers totalled ` 4,000.
- (e) There were arithmetical errors in the stock sheets on 3rd April, 2001 resulting in an over-valuation of ` 4,600.

Prepare statement of Company's stock at cost on 31st March, 2001.

(CA - Adapted)

(Ans. ` 25,000)

29. X Ltd Conducts physical stock taking every year at the end of the accounting year. Due to certain difficulties, it was not possible for it to conduct physical stock taking at the end of the accounting year ending 30th June 2001. Physical stock was taken on 8th July, 2001 when it was valued at ` 34,500.

- (a) Sales during the period were ` 9,340. These goods were sold at the usual rate of gross profit 25% on cost except goods, which realized ` 840 on the basis of 20% profit on cost.
- (b) Purchases during the period were ` 7,500 of which ` 800 worth of goods were delivered to the company only on 10th July, 2001.
- (c) Sales return during the period were ` 1,500 of which 50% were out of the sales at 20% gross profit mentioned above.
- (d) On 5th July, 2001 goods worth ` 4,000 were received, which were to be sold on consignment basis

You are required to prepare a statement showing clearly the value of the stock to be taken into account in X Ltd.'s final account for the year ended 30th June, 201.

(CA - Adapted)

(Ans. ` 30,075)

