## AS -2: VALUATION OF INVENTORIES

| Meaning of Inventories | These are the assets: <br> $\rightarrow$ Held for sale in the ordinary course of business (Finished goods/Stock in trade) <br> $\rightarrow$ In the process of production for such sale (Work -in-Progress) <br> $\rightarrow$ In the form of material or supplies to be consumed in the production process or in the rendering of services (raw material, stores and spares*, etc.) <br> * Inventories do not include spare parts, servicing equipment \& standby equipment which meet the definition of property, plant and equipment as per AS 10 . Such items are accounted for in accordance with AS 10 . |
| :---: | :---: |
| Common Classification of Inventories | (a) Raw materials and components (b) Work-in progress (c) Finished goods <br> (d) Stock-in- trade (in respect of goods acquired for trading) (e) Stores and spares <br> (f) Loose tools (g) Others (specify nature). |
| Non - <br> Applicability | This standard does not apply to : <br> - WIP arising under construction contracts <br> - WIP of service providers <br> - Shares, debentures and other financial instruments held as stock in trade <br> - Producers' inventories of livestock, agriculture and forest products and mineral oils, ores and gases to the extent that they are measured at NRV. |
| Measurement (PARA 5) | Inventories should be valued at lower of cost and net realizable value. |


| Cost of Inventories |  |
| :---: | :---: |
| Cost of Purchase | Conversion cost | | Other cost incurred in bringing |
| :---: |
| the inventory to their present |
| location and condition |

A. COST OF PURCHASE

| Basic Purchase Price | XX |
| :--- | :---: |
| Add Duties and Taxes (non refundable) | XX |
| Add | Freight inwards | XX

B. COST OF CONVERSION


## COST OF CONVERSION (NOT SEPARATELY IDENTIFIABLE) IN CASE OF PRODUCTION PROCESS RESULTING IN MORE THAN ONE PRODUCT BEING PRODUCED SIMULTANEOUSLY

## CASE 1: JOINT PRODUCT:

When the cost of conversion of each product are not separately identifiable, they are allocated between the products on a rational and consistent basis.



Basis of Allocation of Conversion Cost


## CASE 2: MAIN PRODUCT AND BY PRODUCT:

Most by products as well as scrap or waste materials, by their nature are immaterial.
$>$ In such a case, they are measured at NRV and such value is deducted from the cost of main product.

## C. OTHER COST

Other costs are included in cost of inventories only to the extent that they are incurred in bringing the inventories to their present location and condition.
Example: Cost of designing products for specific customers.

## EXCLUSIONS FROM THE COST OF INVENTORIES

* Abnormal amount of wasted materials, labour or other production cost (Abnormal loss)
* Storage cost unless those are necessary in the production process prior to a further production stage.
* Administrative overheads that do not contribute to bringing the inventories to their present location and condition
* Selling and distribution cost
* Interest and other borrowing costs are usually considered as not relating to bringing the inventories to their present location and condition and are therefore usually not included in cost of inventory.

For items that are not ordinarily interchangeable
Specific identification of cost method:
Specific costs are attributed to identified items of inventory

## For other items

FIFO: Inventory which were purchased or produced first are sold or consumed first or
Weighted Average method: Weighted average of cost of similar items

## TECHNIQUES FOR MEASUREMENT OF COST

 (May Be Used For Convenience if Results Approximate Actual Cost)| Standard Cost method | Retail method |
| :--- | :--- |
| Takes into account normal levels of <br> consumption of materials and supplies, labour, <br> efficiency and capacity utilization | $\bullet$ Often used in the retail trade for measuring <br> inventories of large numbers of rapidly <br> changing items that have similar margins <br> $\bullet$ Inventory is determined by reducing from <br> sales value of inventory the appropriate GP \% |

NET REALISABLE VALUE (RV)

| Estimated Selling Price | XX |
| :--- | :---: |
| Less: Estimated selling expenses | (XX) |
| Less: Estimated cost of completion | (XX) |
| NRV |  |

* NRV is to be seen on each and every balance sheet date.
* Inventories should be usually written down to NRV on an item by item basis (individual basis) and not on global basis.
* In case of firm/committed contract of sale, NRV shall be calculated at the contract price.


## Example:





VALUATION OF MATERIALS AND OTHER SUPPLIES (PARA 24)


If finished product in which such raw material is to be used is expected to be sold at or above cost price $\left[\mathrm{SP}_{\mathrm{FG}} \geq \mathrm{CP}_{\mathrm{FG}}\right.$ ]
Value Raw Material at Cost Price.

Value Raw Material at Lower of Cost price or Replacement price [CP or RP $\downarrow$ ]

## DISCLOSURE REQUIREMENTS:

* Accounting policies
* Cost formula used
* Total carrying amount of inventories \& its classification



## Question 1

An enterprise ordered 13000 kg of certain material at Rs. 90 per unit. The purchase price includes GST at Rs. 5 per kg, in respect of which full credit is admissible. Freight incurred amounted to Rs. 80,600.
Normal transit loss is $4 \%$. The enterprise actually received $12,400 \mathrm{Kg}$ and consumed $10,000 \mathrm{Kg}$.
What is the cost of inventory.

## Solution

| Purchase price $(13,000 \mathrm{Kg}$. x Rs. 90) | $11,70,000$ |
| :--- | :---: |
| Less: GST Credit $(13,000 \mathrm{Kg} . \times$ Rs. 5) | $(65,000)$ |
|  | $\mathbf{1 1 , 0 5 , 0 0 0}$ |
| Add: Freight | 80,600 |
| Total material cost | $\mathbf{1 1 , 8 5 , 6 0 0}$ |
| Number of units normally received $=96 \%$ of $13,000 \mathrm{Kg}$. | $12,480 \mathrm{~kg}$ |
| Normal cost per Kg. $(11,85,600 / 12,480)$ | $\mathbf{9 5}$ |


|  | Kg | Rs. /Kg. | Rs. |
| :--- | :---: | :---: | :---: |
| Materials consumed | 10,000 | 95 | $9,50,000$ |
| Cost of inventory | 2,400 | 95 | $2,28,000$ |
| Abnormal loss | 80 | 95 | 7,600 |
| Total material cost | $\mathbf{1 2 , 4 8 0}$ |  | $\mathbf{1 1 , 8 5 , 6 0 0}$ |

Note: Abnormal losses are recognised as separate expense in the Profit \& Loss Account

## Question 2

The closing inventory at cost of XYZ Ltd. amounted to Rs. 9,56,700. 350 Shirts, which had cost Rs. 380 each and normally sold for Rs. 750 each are included in this amount of Rs. 9,56,700. Owing to a defect in manufacture, they were all sold after the Balance Sheet date at $50 \%$ of their normal price. Selling expenses amounted to $5 \%$ of the proceeds. What should be the closing inventory value?

## Solution

Calculation of value of closing inventory

| Value of closing inventory (given) | $9,56,700$ |
| :--- | :---: |
| Less: Adjustment to bring the stock of shirts at NRV (W.N 1) | $(8,313)$ |
| Revised value of closing inventory as per AS 2 | $9,48,387$ |

Working Notes 1: Valuation of Shirts as per AS 2

| Cost price (per shirt) | 380 |
| :--- | :---: |
| NRV per shirt : |  |
| Sale price (per shirt) Rs. $750 \times 50 \%$ |  |
| Less : Selling expenses (5\% of Rs. 375) | $=(18.75)$ |
| NRV (per shirt) | $=356.25$ |
| As per AS 2, inventories are valued at cost or NRV whichever is less | 356.25 |
| Difference of cost and NRV | 356.25 |
| Therefore, value of inventory of shirts to be reduced by Rs. 8,313 (approx) (Rs. 23.75 x 350 shirts) |  |

## Question 3

A Limited is engaged in manufacturing of Chemical Y for which Raw Material X is required. The company provides you following information for the year ended 31st March, 2021.

|  | Rs. per unit |
| :--- | :---: |
| Raw material X |  |
| Cost price | 380 |
| Unloading charges | 20 |
| Freight inward | 40 |


| Replacement cost | 300 |
| :--- | :---: |
| Chemical Y |  |
| Material consumed | 440 |
| Direct labour | 120 |
| Variable overhead | 80 |

Additional Information:
(i) Total fixed overhead for the year was Rs. 4,00,000 on normal capacity of 20,000 units.
(ii) Closing balance of Raw Material X was 1,000 units and Chemical Y was 2,400 units.

You are required to calculate the total value of closing stock of Raw Material X and Chemical Y according to AS 2, when
(a) Net realizable value of Chemical Y is Rs. 800 per unit
(b) Net realizable value of Chemical Y is Rs. 600 per unit

## Solution

(a) When Net Realizable Value of the Chemical Y is Rs. 800 per unit NRV is greater than the cost of Finished Goods Y i.e. Rs. 660 (Refer W.N.) Hence, Raw Material and Finished Goods are to be valued at cost.
Value of Closing Stock:

|  | Qty. | Rate | Amount |
| :--- | :---: | :---: | :---: |
| Raw Material X | 1,000 | 440 | $4,40,000$ |
| Finished Goods Y | 2,400 | 660 | $15,84,000$ |
| Total Value of Closing Stock |  | $\mathbf{2 0 , 2 4 , 0 0 0}$ |  |

(b) When Net Realizable Value of the Chemical Y is Rs. 600 per unit NRV is less than the cost of Finished Goods Y i.e. Rs. 660.
Hence, Raw Material is to be valued at replacement cost and Finished Goods are to be valued at NRV since NRV is less than the cost.
Value of Closing Stock:

|  | Qty. | Rate | Amount |
| :--- | :---: | :---: | :---: |
| Raw Material X | 1,000 | 300 | $3,00,000$ |
| Finished Goods Y | 2,400 | 600 | $14,40,000$ |
| Total Value of Closing Stock |  | $\mathbf{1 7 , 4 0 , 0 0 0}$ |  |

## Working Note:

Statement showing cost calculation of Raw material $\mathbf{X}$ and Chemical $Y$

| Raw material X | Rs. per unit |
| :--- | :---: |
| Cost price | 380 |
| Add: Unloading charges | 20 |
| Add: Freight inward | 40 |
| Cost | 440 |
| Chemical Y | Rs. per unit |
| Material consumed | 440 |
| Direct labour | 120 |
| Variable overhead | 80 |
| Fixed overheads <br> $(4,00,000 / 20,000)$ | 20 |
| Cost | $\mathbf{6 6 0}$ |

