INVENTORIES

INVENTORIES

- Raw Material
- Work in Progress
- Finished Good
- Stock in Trade
- Packing Material
- Spare Parts

Purch. Paper → Raw Material

Printing → Work in Progress

Final Binding → Finished Goods

Motivational Stickers (Directly purch. from outside) → Stock in Trade

Final packaging → Packing material

Raw Material, Work in Progress, Finished Goods, Stock in Trade, Packing material → Opening stock / Closing stock

Inventory.

Cartridge
1
2
3 } spare parts

Cartridge can be used ≤12m : Current Asset → Inventory

Printer
1 → use
2 → spare

Printer can be used >12m : Fixed Asset → X

VALUATION OF INVENTORY

At the end of every financial year, we need to calculate the value of inventory (i.e. RM, WIP, FG, SIT, Packing Mat., Spares)

In order to calculate the value of inventory, the following principle needs to be applied :-

Valuation of Inventory

COST — NRV

LOWER

Prudence /conservatism :- Anticipated losses /expenses should be immediately recognised.

However, anticipated incomes/gain should be recognised only when they're actually realised.

Trading a/c 31.3

Opening Stk	Sales
Purchase	
D. Exp.	Closing Stock — RM: C = 100, NRV = 120 (Higher) ✗ — CS ↑20
Gross Profit ↑20	

↓

realised = X

↓

Again prudence or conservatism

Trading a/c 31.3

Opening Stk
Purchase
D. Exp.
Gross Profit ↓20 (Loss recognise)

Sales
Closing Stock

RM: C = 100
NRV = 80 ✓ (LOWER)
120
CS ↓ 20

↓
Anticipated losses can be recognised.

Calculation of COST

Inventory

Raw Material

→ Ram
→ Processor
→ Battery
→ Camera

Purchase Price — 5000/unit
− Trade Discount — (1000/unit)
4000/unit

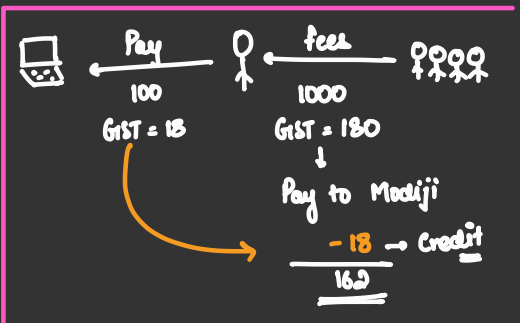
GST — 200/unit
(Recoverable Tax - Not included in cost)
+ Custom Duty — 200/unit
(Non-recoverable Tax - included in cost)

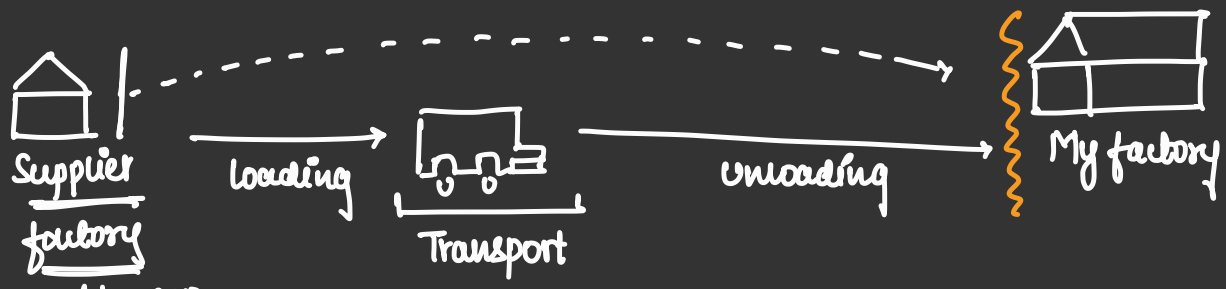
+ All costs necessary to bring inventory to its present location and condition
+ Normal loss
(Abnormal loss is not included)

Work in Progress & Finished Goods

1. Cost of RM
+ Conversion cost
→ Variable
→ Fixed

Sale = 50000
s/r. GST = 2500
− GST Input u. = (200)
Net GST pay = 2300



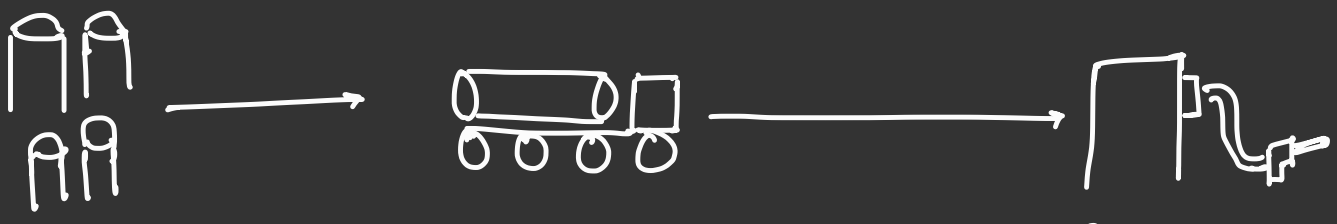


Transit Insurance
↓
add

Godown Insurance
↓
X

Normal Loss	Abnormal Loss
↓	↓
Included in cost of inventory	Not Included in cost of inventory

NORMAL LOSS



1000 l
@ ₹100/litre.
= ₹100,000

50 l evaporate
↓
Normal loss
Included in cost of inventory.

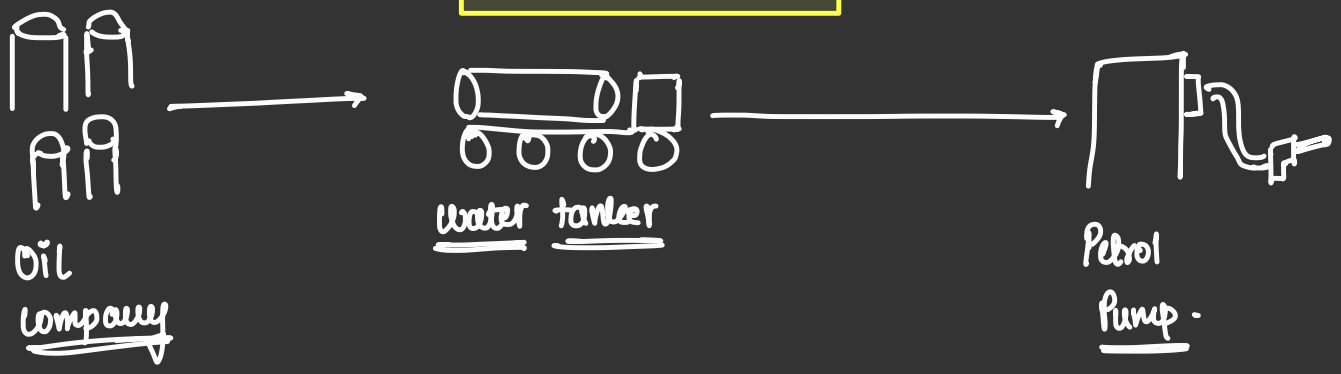
50 × 100 = 5000

950 l
= 100,000

100000 / 950
= 105.26 / l.
+ 5
110.26

950
× 5.26
4997

ABNORMAL LOSS



1000 l
@ ₹100/litre.
= ₹100,000

50 l
evaporate
↓
NORMAL LOSS

200 l
leak
↓
ABNORMAL LOSS

200 x 105.26
= 21052 → P&L Dr.

(P&L) Abnormal loss Dr. 21052
To. Trading a/c 21052

750 l
= 100,000

100,000 / 750
= 133.33 / l
+ 5
138.33

950 l
100,000
= 105.26 / l
+ 5
110.26

Example 1:- Mohan ltd. purchased 100,000 units of Raw Material @ ₹ 35/unit to produce finished Good - x.
During the production process the normal wastage is 4%. Calculate the effective cost price/unit of RM to be included in finished Good x.

Solution:-

RM → Prodn process → Finished Good x

RM
100000 u
@ 35/unit
= 3500,000

Normal loss
= 4000 units.

Finished Good x
Effec. units = 96000u
Total cost = 3500,000
Eff. cost/unit = 36.46/u

Example 2:- Mohan ltd. purchased 100000 units of Raw Material @ ₹ 35/unit to produce finished Good - X. During the production process the normal wastage is 4%. However, Mohan ltd. incurred total wastage of 5500 units. Calculate the effective cost/unit of RM to be included in the cost of finished Goods.

Solution :-

100000 units @ ₹ 35/unit → Prodn Process → finished Goods.

= 3500000

Normal loss = 4%
= 4000 u (4000 × 35 = 140000)

Abnormal loss
= 1500 units

⇒ P&L Dr. = 1500 × 36.46
= 54690

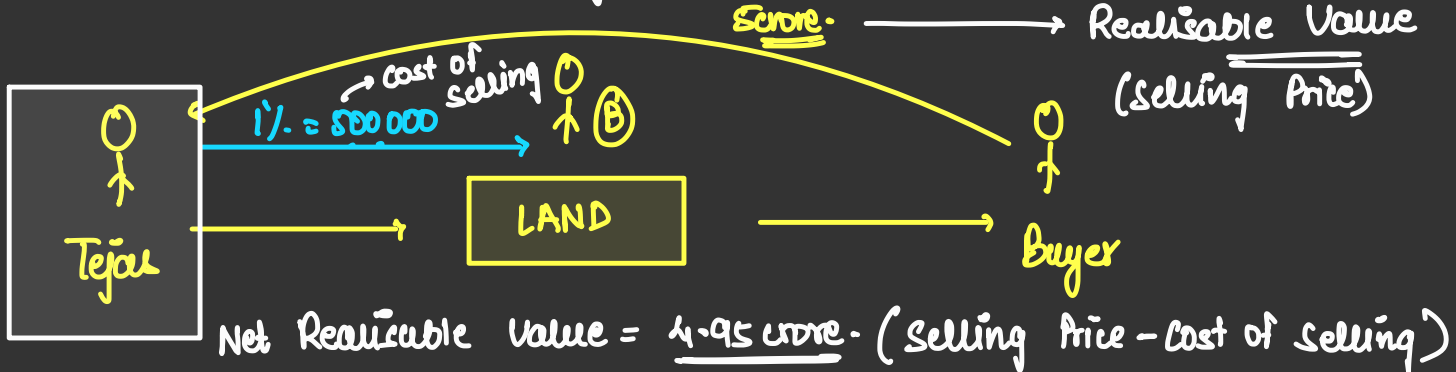
Effective cost/unit

1. Total cost = 3500000
2. Effec. units = 96000
3. Cost/unit = 36.46/u.

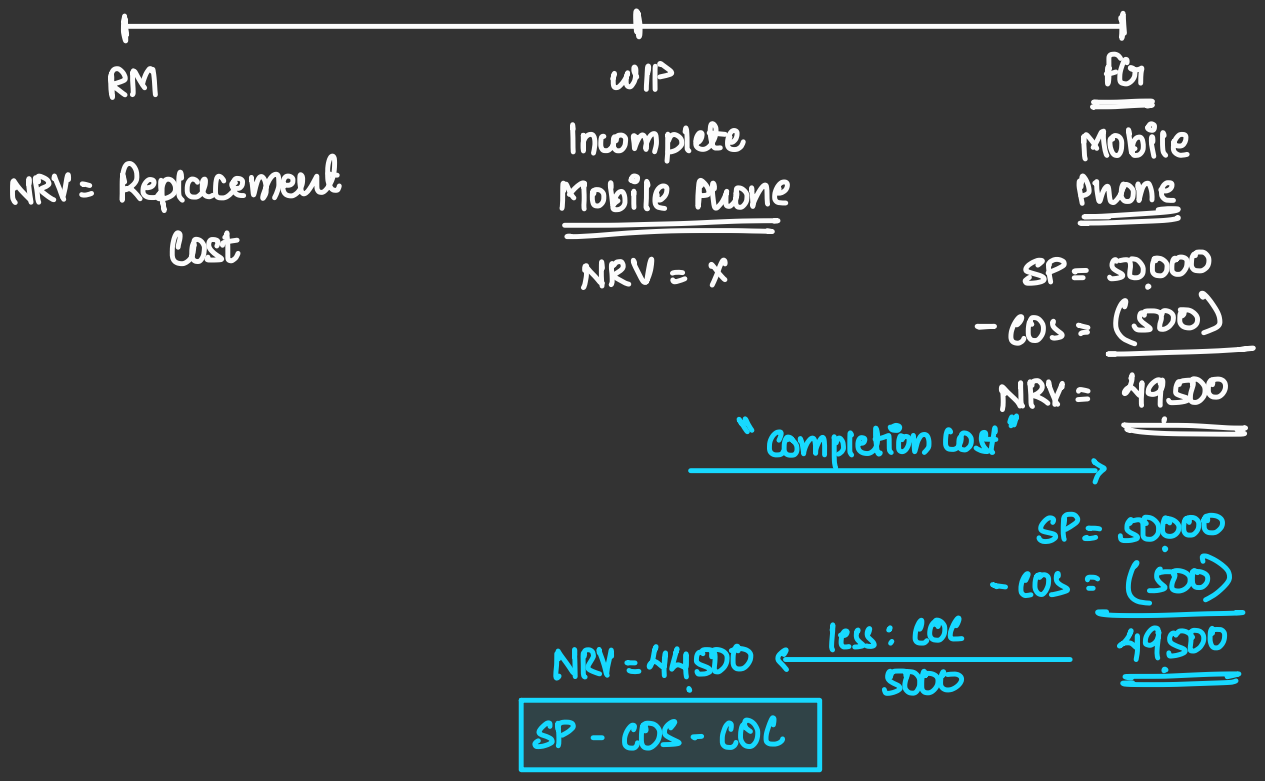
Increase = 36.46 - 35
= 1.46/unit
× 96000
140160

Calculation of NRV

Net Realisable Value = It is the net value that can be realised from disposing the asset. In simple terms, we can understand it as the final amount that will land our pockets on selling an asset.



Net Realisable Value = 4.95 crore - (Selling Price - Cost of selling)



RM : Replacement cost

WIP : SP - COS - COC

FGs : SP - COS

} NRV

FORMULA / METHODS FOR DETERMING COST

RM

10/4 → cost : PP - TD + NRT + All cost PL & PC + NL
25

10/7 → cost : PP - TD + NRT + All cost PL & PC + NL
27

10/9 → cost : PP - TD + NRT + All cost PL & PC + NL
26

10/12 → cost : PP - TD + NRT + All cost PL & PC + NL
26.5

10/1 → cost : PP - TD + NRT + All cost PL & PC + NL
24

10/3 → cost : PP - TD + NRT + All cost PL & PC + NL
25

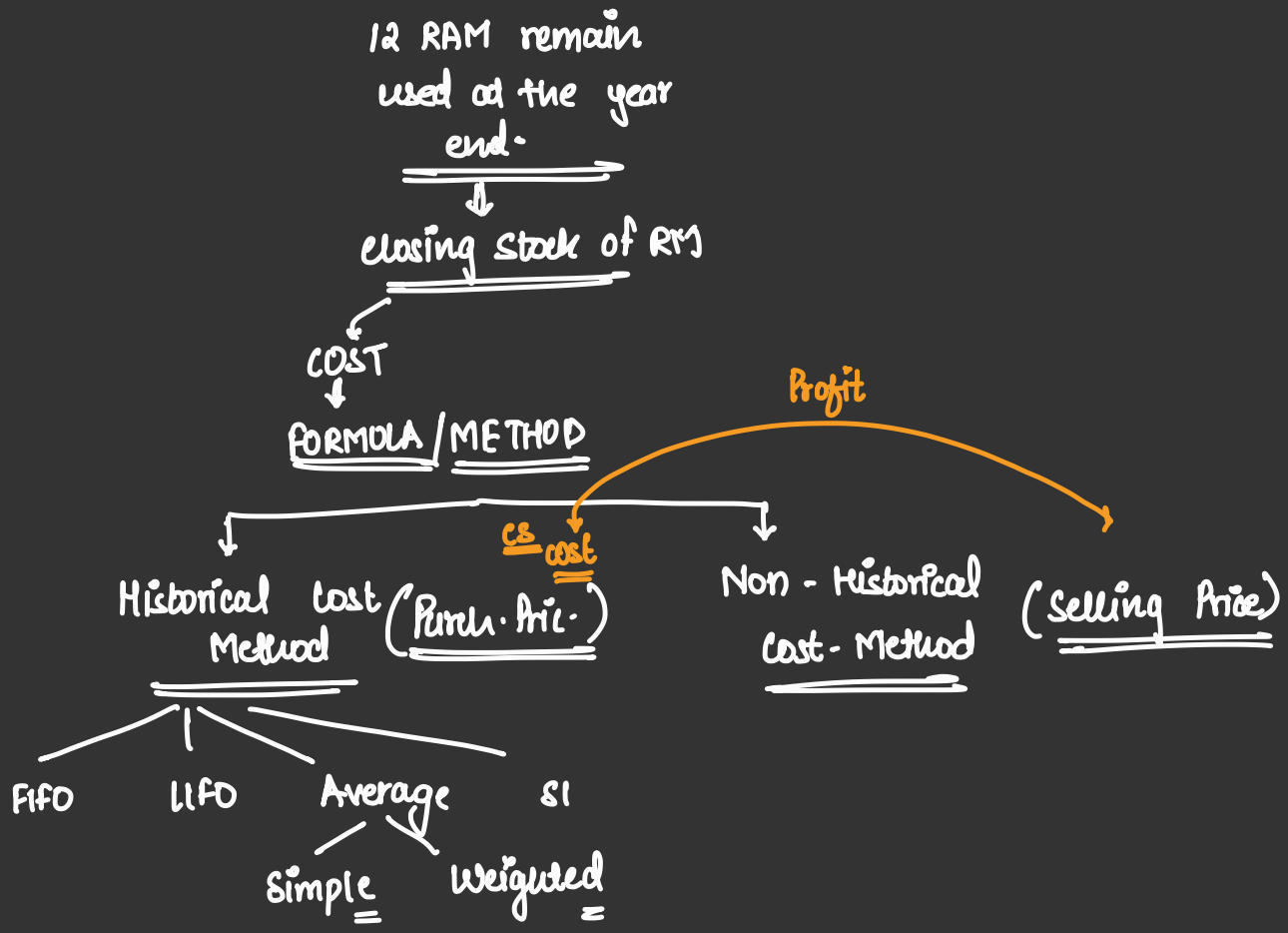
12 bottles ⇓ COST

$$\frac{25 + 27 + 26 + 26.5 + 24 + 27}{6}$$

= 25.5 (Assumed)

× 12

Closing stock



1- First In First Out : Inventory that is purchased earliest will be consumed earliest.

This means inventory that is purchased at last will form part of the closing stock.

Inorder to determine the cost of closing stock, we will consider the inventory that is purchased at last.

2- Last In First Out Inventory that is purchased last will be consumed earliest.

This means inventory purchased earliest will form part of the closing stock.

Inorder to determine the cost of closing stock, we will consider the cost of inventory that is purchased earliest.

While calculating closing stock using LIFO method we need on the Date of Issue and the

date of purchase. This is because purchases made after date of issue will not be considered to calculate the stock issued / consumed / sold.

3. Average Price Method :

a. Simple Average :

* Under this method the price of closing stock is calculated using the average of all prices / cost incurred while purchasing at different points of time.
* (Goods Purchased - Goods Issued/sold) x simple Average Price = Cost of closing stock.
* This method is used when inventory is of a nature that is not perisable or it is not technological.
* The drawback of this method is that no importance is given to the quantity of inventory purchased at different prices

weighted Average

50 u	5000u	10000u	8000u	7000u ← weight (w)
x	x	x	x	x
₹ 500	₹ 190	₹ 170	₹ 185	₹ 182 ← cost (u)
=	=	=	=	=
25000	+ 950000	+ 1700000	+ 1480000	+ 1274000 = 5429000 / 30050

= 180.67

$$\text{weighted Average} = \frac{w \times u + w \times u + w \times u}{w}$$

$$\text{simple Average} = \frac{u + u + u + u + u}{5}$$

b. Weighted Average

* In this method, the cost of closing stock is calculated using an average that includes both the quantity and price of goods.

* Here, quantity of goods is considered as weights which is then multiplied by the price which is considered as units.

* This method gives a more precise average than simple average method. This is because this method also considers the quantity purchased at each price to arrive at the average price, thus removing the drawback of simple average method which totally ignores the quantity purchased at each price point.

Formula :- $$\frac{wxu + wxu + wxu}{\Sigma w}$$

4. Specific Identification

FIFO / LIFO / Average

↓

Goods that are interchangeable

↓

mobile phone ⇒ 50000 u

Spec. Identification

↓

Goods that are not interchangeable

↓ ↓ ↓

Rafale jets 36 | Rafale-M Jets 36 | Submarines ↓ 3

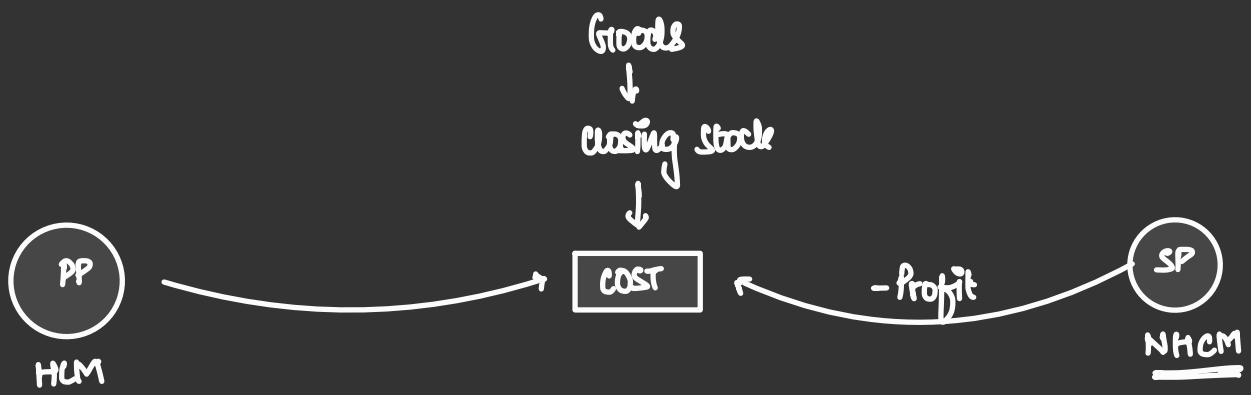
50 crores/ engine → CS = 20 engines

60 crores/ engine → CS = 15 engines

125 crores/ engine → CS = 2 engines

12th December	→ Company Accounts : Issue of Share
13th December	→ Forfeiture & Reissue of Shares
14th December	→ Issue of Debentures

18th December - Pre Exam Marathon



Inventory meaning

- RM
- WIP
- FGI
- SIT
- Packing material
- Spare Parts
  - Useful life
    - >1am → FA/PPE
    - <12m → Inventory (CA)

NRV of Inventory

- RM → Replacement cost → NRV
- WIP → Completion cost → FGI
- NRV of WIP = NRV of FGI − Completion cost
- NRV of FGI = Selling Price − Cost of Selling

Inventory Valuation

Cost / NRV → Lower

(Prudence / Conservatism)

Anticipated Income → x

Anticipated Losses → ✓

COST FORMULA / METHOD

- Historical Cost Method
  - Interchangeable Goods
    - FIFO
    - LIFO
    - Average
      - Simple
      - weighted
  - Non-Interchangeable Goods → Specific Identification
- Non-Historical cost
  - Adjusted Selling Price Method.
  - Standard cost

⇓

This is used to calculate the cost of goods left in closing stock out of the total goods that are purchased or produced during the year.

COST OF INVENTORY

RM

1. Purchase Price
- Trade Discount
+ Non-recover. taxes
+ All cost incurred to bring inventory to present location & condition
+ Normal loss (Abnormal loss − x)
+ Storage cost (If necessary for this)

= Cost of Raw Material

WIP / FGI

1. Cost of Raw Mat.
2. Conversion Cost (Labour / Electricity / Depn on macn. / Rent on fac. build.)

= COST OF WIP / FGI

This is cost of RM/WIP/FGI everytime it is purchased or produce.