CA RISHABH ROHRA

Foundation Level

(1) Forward , Backward ⟶ PV
(2) LIFO, FIFO, Weighted Avg , Adj. selling price method
(3) Value ⟶ Cost or NRV w.e.L

Ex:- 1500 mobile ⟶ purchase
900 mobile ⟶ sold
} unsold 600 mobile ⟶

AS-02: INVENTORY

MEANING OF INVENTORIES

machine ↓ held for sale ↓ Business ⟶ X AS-2 X ↓ goods ✓ ↓ AS 2 ✓

Inventories are the assets: unconsumed or in process of conversion or unsold

- ✓ Held for sale (unsold) in the ordinary course of business (Finished Goods/Stock-in-Trade)
- ✓ In the process of production for such sale (Work-in-progress)
- ✓ In the form of material or supplies to be consumed in the process or in the rendering of services (Raw material)

For ⟶ vgurukul ⟶ Teaching service

Inventory kya hai ??
→ Books
→ T-shirt , Hoodies for Teachers

Note: Inventories do not include

a) *spare parts*
b) *servicing equipment and*
c) *standby equipment*

which meet the definition of PPE as per AS 10.
Accounting treatment of such items shall be done in accordance with AS 10.

* Finished goods vs Stock-in-trade

Finished goods ↓ manufacture ⟶ Rm ⟶ Fg (process) ↓ sold

Stock-in-trade ↓ Trader ⟶ goods purchase and then goods sale

Inventory ⟶ unsold stock of Fg, stock-in-Trade on the date when FST are prepared

* Work-in-progress [in process of production] — only for manufacturer

Rm ⟶ machine [for processing] ⟶ Fg
purchase

Inventory ⟶ Dt. on which FST are prepared & Rm which is still is processing to be converted in Fg

WIP ⟶ Beech ka Bandar
Rm x ⟶ Because processing ✓
Fg x ⟶

NON-APPLICABILITY OF AS 02

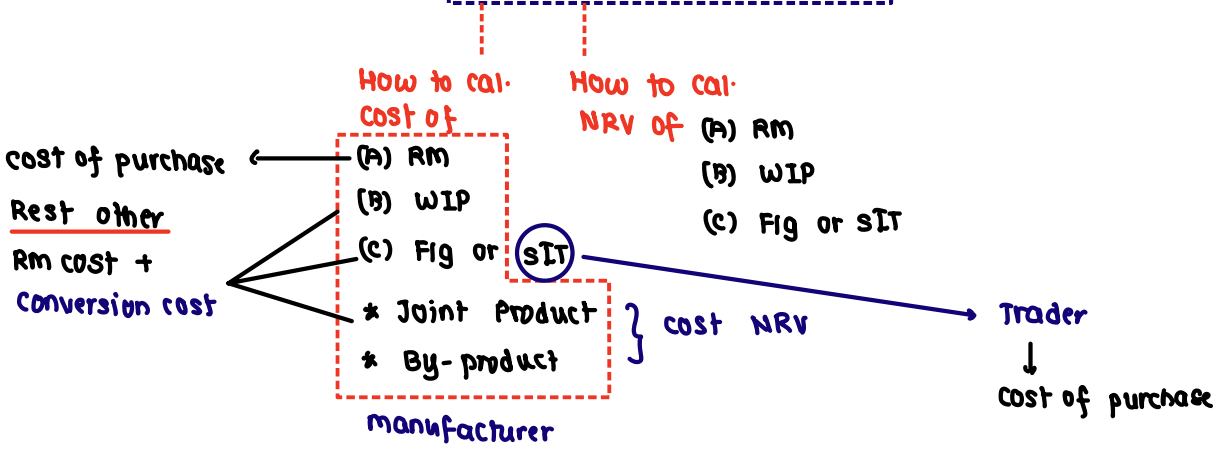
This standard does not apply to

- ✓ WIP arising under construction contracts (AS 07)
- ✓ WIP of service providers
- ✓ Shares, debentures and other Financial instruments held as stock in trade [Broker, Trader, Financial Institution]
- ✓ Producers' inventories of Livestock, agricultural and Forest products and Mineral oils, ores and gases to the extent that they are measured at NRV.

Ind-AS

VALUATION OF INVENTORY

- ✓ Inventory should be valued at cost or NRV whichever is lower



COMPUTATION OF COST OF INVENTORIES

↳ RM, WIP, FIG, SLI

Cost will incl. cost of pur. of RM

Cost of Purchase

Manufacture → for Raw material

Trader → for stock in Trade

Conversion Cost → only for manufacturer

Other costs incurred in Bringing the inventory to their present location and Condition

Mfg'ing → cost of pur and conversion cost

Trader → cost of purchase

manufacturer → RIM → cost of purchase

For a Trader → SIT → cost of purchase

Cost of Purchase → Joh chize aap Trading A/c mein dalte then as expense

Basic Purchase Price	-
+ Duties and Taxes (Non-refundable)	-
+ Freight Inward	-
+ other directly attributable expenditure	-
- Trade Discount and Rebates	-
Cost of Purchase	-

Note: Directly Attributable Expenditure includes:

- ✓ Buying commission where purchase of material is possible only through Buying agents
- ✓ Cost of containers
- ✓ Transit Insurance

normally P&L A/c, but in this case added to cost of purchase

Example

Mr. B (manufacturer) → Mr. A → Customer

Whey protein seller

1 kg → ₹2000 sell

Trader

[purchaser and seller of whey protein]

cost of Inventory

Stock-in-trade

↓

cost of purchase ✓

conversion cost → Not applicable

Purchase and process and sell whey protein

Mr. C

milk

Inventory

RM → cost of purchase

FG → RM cost of pur. + conversion cost

WIP → RM cost of pur. + conversion cost (if any) which is in processing

AS 10 ⟶ PPE ⟶ What all amount is added to cost of PPE

COA ⟶ purchase price

(-) Trade discount and Rebate

+ Non-Refundable or Non-Adjustable Taxes

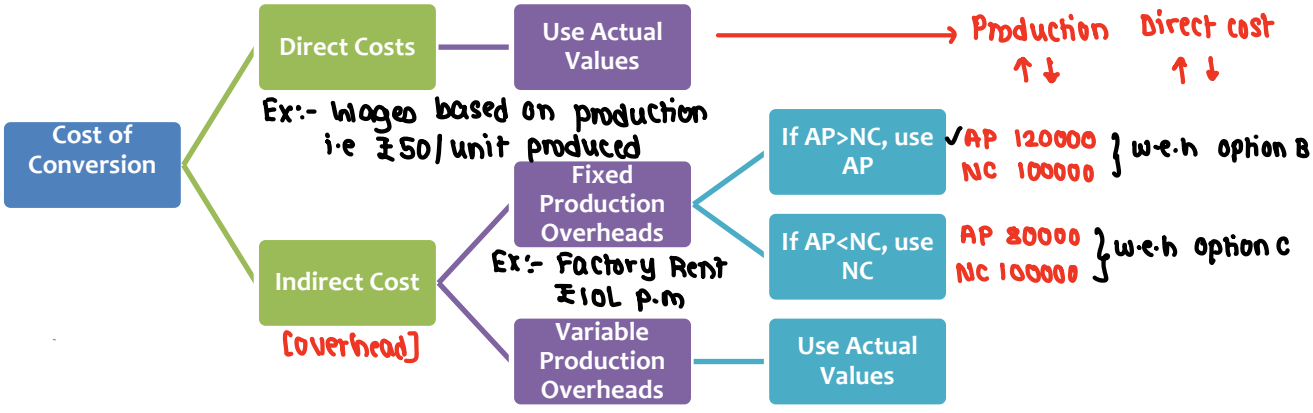
+ cost directly attributable [Asset ko Ready to use at location and purpose intended by management]

+ Decommissioning and Restoration exp @PV

+ Borrowing cost As per AS-16, if it's a QA ------ applies for manufacturer

Rm → (conversion cost) → FG

Cost of Conversion



AP = Actual Production
NC = Normal Capacity

Example 1

ABC ltd has a factory which can produce 1,00,000 unit p.a

cost matrix → Rm ₹50/unit
Wages ₹30/unit
Factory Rent → ₹10,00,000 p.m

Cal. cost / unit

Option A : Actual Production → 100000 p.a

Rm → ₹50
Wages → ₹30
Rent → ₹120 ← [10,00,000 x 12/100000]
₹200/unit

Option B :- Actual Production → 1,20,000 p.a

Rm → ₹50
Wages → ₹30
Rent → ₹100 [10,00,000 x 12/120,000]
₹180

Option C :- Actual Production → 80,000 p.a

		₹
Rm →	₹50	50
Wages →	₹30	30
Rent →	₹150	120 → [10,00,000 x 12/1,00,000]
	₹230	₹200

NC 100000 } w.e.h
AP 80000

[10,00,000 x 12/80000] X

∴ Rent → 120 x 80,000 → ₹96,00,000 Inventory +
120 x 20,000 → ₹24,00,000 P&L A/c

Cost of Conversion (Residual Cases)

CASE 1: When Joint Product is formed and cost of conversion of each product are not separately identifiable

Treatment: Allocate cost of conversion on a rational & consistent Basis (i.e. allocate in the ratio of their relative sales value of each product either at the stage of production or at the stage of completion of production.

CASE 2: When By-Product (scrap or waste materials) is formed along with Main Product Compulsorily

Treatment:
Step 1: Measure such scrap at NRV if unsold value at NRV
Step 2: Deduct its value from the cost of main product [after By-product sale / produced]

Amul Factory

RM (milk) → processing → Dahi
processing → Skimmed milk [Low fat milk]

processing ↓ conversion cost → AS-2 guide us on allocation of conversion cost in case of Joint product

→ Labour same
→ OIH same

Example → conversion cost ₹100,000

Unit Produced → Dahi → 5000 unit SP ₹28 ∴ ₹1,40,000
milk → 15000 unit SP ₹26 ∴ ₹3,90,000
5,30,000

∴ conversion cost allocation → Dahi → ₹1,00,000 × ₹140000/₹530000 i.e ₹26,415
milk → ₹1,00,000 × ₹390000/₹530000 ie ₹73,585

milk purchase [Raw material] → processing → main product → paneer
processing → By-product → whey protein
Cost → possible x
NRV → available ✓
↳ main product cost (-)

Example → 1000ltr milk purchase
↳ 100kg paneer
and 500ltr whey protein water
↳ sold e ₹10/ltr
∴ ₹5000 Reduced from cost of paneer
[500 × 10]

Other Costs

Include only if incurred in bringing the inventory to their present location and condition

Example: Cost of designing products for specific customers

↓
Cost of Inventory

Exclusions from the cost of Inventories (PARA 13)

- ✓ Abnormal Loss
- ✓ Storage Cost ⟶ if storage is part of prodn process then ADD
  Ex:- Wine
- ✓ Administrative overheads
- ✓ Selling and Distribution Overheads
- ✓ Interest and other borrowing costs ⟶ If Inventory → QA → AS 16, the Interest till Item is Ready to sale ADD

Discussion of normal loss and abnormal loss

unavoidable | avoidable

Vegetable vendor

Supplier of Tamatar ⟵ ₹10/kg i.e ₹200 ⟵ Tamatar 20kg ⟶ Sabji wale

Sabji wale ---------- cost/kg ₹200/18kg i.e ₹11.11 == ⟶ Normal saleable units

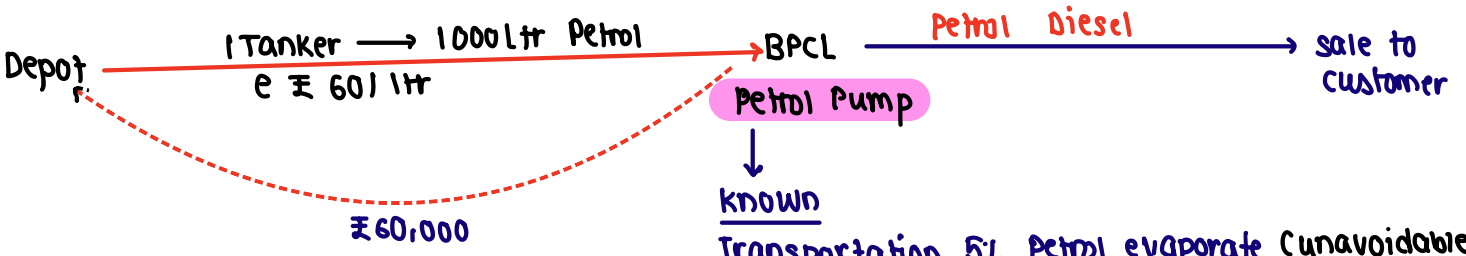
Known 20kg + 2kg Kharab

Reality only 15kg Tamator were saleable Rest all Rotten

∴ Abnormal loss = 3kg x 11.11
= ₹33.33 ⟶ P&L A/c Dr.

20kg
(-) 2kg ⟶ Normal Loss
18kg
(-) 3kg ⟶ abnormal loss
15kg

Petrol Pump Dealer



↓

known

Transportation &/. Petrol evaporate (unavoidable)

∴ Cost / ltr → ₹60,000 / 950 ltr

i.e ₹63.16

Reality → Recd. 920 ltr petrol mila

1000 ltr order

(-) 50 ltr normal → Allcting x

950 ltr

(-) 30 Abnormal Loss

920 ltr

↳ P&L A/c Dr. 1,894.8 (30 × 63.16)

To Trading

To Purchase	1000 ltr	₹60,000	By sale	–	–
			By Abnormal Loss	30	1,894.8
			By Cl. stock	920 ltr	58,107.2
To Abnormal Loss →		₹1894.8			

920 x 60

920 x 3.16

Normal Loss → 50 x ₹60 i.e ₹ 3,000 → Distribute → (1000 - 50)

i.e 950 unit

i.e 3.16 / unit ↑

CQ1

Order 20,000 kg @ ₹110/kg ⟶ ₹ 22,00,000 (incl. gst @ ₹12/kg)

∴ Less:- Taxes [20000 kg × ₹12/kg] → ₹ 2,40,000

₹ 19,60,000

+ Freight charges ⟶ ₹ 1,17,600

₹ 20,77,600

No. of unit expected to be recd. 19,600 kg
[20000 kg (-) 2% Normal Loss]

∴ Cost / kg ⟶ ₹106/kg

Unit Actually Recd. ⟶ 19500 kg

∴ Abnormal Loss [19600 kg (-) 19500 kg] 100 kg

∴ Value of Ab.normal Loss [100 × 106] ₹ 10,600

20000 kg
(400)
19600
100
19500
18000
1500 unsold

∴ Value of Cl. Stock / Inventory ⟶ ₹ 106 × 1500
= ₹ 1,59,000

CQ2

	Unit	₹/unit	Amt (₹)
Tot amount paid / payable for RM ⟶	12,000	150	18,00,000
(-) Normal Loss ⟶	480		
	11,520	₹156.25	18,00,000
Actual Prodn excl. wastage [12000 (-) 630]	11,370		17,76,562.5
Ab.normal Loss ⟶	150	₹156.25	23,437.5

RM + conversion cost

Cost Formulas

a) **Specific Cost Identification Method:** Specific costs are attributed to identified items of Inventory for items that are not ordinarily interchangeable — Iphone 17 → Iphone 13 Sold / Stock (-) → NO

b) **FIFO or Weighted Average Method:** used in other cases ← goods can be used inter-changability

	RM purchase	RM issued for prodn
10/06/18	500 unit @ 11	-
10/07/18	600 unit @ 12	-
12/07/18	-	650 unit ---------- FIFO 500 x 11 + 150 x 12
13/07/18	1000 unit @ 9	-
31/07/18	-	350 unit ---------- FIFO 350 x 12

Iphone 17 = Purchase = Sold

W.Avg = [₹5500 + ₹7200 / 500 + 600] x 650 i.e ₹7504

W.Avg = [5500 + 7200 (-) 7504 + 9000 / 500 + 600 (-) 650 + 1000] x 350 = i.e 3426 → i.e 14196/1450 x 350

Cl. Inventory RM

FIFO → 100 x 12 + 1000 x 9 = 10,200

W. Avg = 10,770 ← 14196/1450 x 1100

Cost of RM issued for production

FIFO = ₹11500

W.Avg = ₹7504 + ₹3426 = ₹10,930

If today, I sell the inventory, what will it fetch

Net Realisable Value (NRV)

RM Ready market → RM

Computation of NRV

Estimated Selling Price (of FG → FG ka NRV → NRV of WIP)	-
Less: Estimated Selling Expenses (of FG → NRV)	-
Less: Estimated Cost of Completion (of WIP to FG → WIP)	-
Net Realisable Value	-

Notes:

a) Value Inventories at NRV on Individual Basis and not on Global Basis

b) NRV = Contract Price, in case of Firm/Committed Contract of Sale

∴ First we shall cal. NRV of FG ------- this can also be used for SIT

Estimated selling price	xxxx
(-) estimated selling exp	x
NRV	xxxx

Now, we shall calculate

NRV of WIP →

Estimated selling price of FG	
(-) estimated selling exp of FG	
(-) cost need for converting this WIP to FG	xxxx

RM

Valuation of Materials and Other supplies (PARA 24)

or SP = Cost

a) If SP of FG ≥ CP of FG: Value Raw Materials at CP
b) If SP of FG < CP of FG: Value Raw Materials at Lower of CP or RP

SP = Selling Price
CP = Cost Price
RP = Replacement Price
FG = Finished Goods

FIg, SIT, WIP } Value at Cost or NRV w.e.L

RM ⟶ valued at cost or Replacement
↳ Depends on whether fg value at cost or NRV

Disclosure Requirement

Kya राजा ! Ab Disclose कर ले ?

- ✓ Formula used to Find Cost
- ✓ Accounting Policies used
- ✓ Total Carrying amount of inventories cost
- ✓ Classification of amount of inventories RIm, WIP, FIg, SIT, JP, By-product

Repeat

Inventory shall be valued at cost or NRV w.e.Lower

↳ FIg, WIP, SIT

FIg or SIT → SP (-) SE

WIP ⟶ Fg SP (-) Fg SE (-) COC of WIP into FG

However in case of RM which is normally valued at cost

Exception

If Fg SP < Cost of Fg then RIm shall be valued at Cost or Replacement cost w.e.L

If RIm is purchased today what amt will I need to pay

CQ6

RM X ——Processing——→ Chemical Y

Cost/unit [380 + 20 + 40] i.e ₹440/unit

Replacement cost ₹300

Cost / unit

RM consumed		₹440
Conversion cost		
Direct labour	120	
Variable OIH	80	
Fixed OIH [4L/20000]	20	₹220
FG cost/unit		₹660
NRV		₹800

Finished goods ⟶ 2400 unit × ₹660/unit ⟶ ₹15,84,000

Raw material ⟶ 1000 unit × ₹440/unit ⟶ ₹4,40,000

₹20,24,000

CQ7

Cal. of cost/unit for Raw material P

	₹
Cost price [excl. gst]	230
+ Freight inward	30
+ Handling charges	15
Cost/unit	₹275
Replacement cost/unit	₹180

Cal. of cost/unit for FG Q

	₹
RM cost	250
+ Direct labour	70
+ Direct OIH	30
+ Fixed OIH [3,00,000/30000]	10
Cost/unit	360

Case1 :- FG NRV is ₹450

∴ FG Cl. stock value ⟶ 1500 unit × 360/unit ⟶ ₹5,40,000

RM Cl. stock value ⟶ 600 unit × 275/unit ⟶ ₹1,65,000 ₹7,05,000

Case 2:- FG NRV is ₹340

∴ FG Cl. stock value ⟶ 1500 unit × 340/unit ⟶ ₹5,10,000

RM Cl. stock value ⟶ 600 unit × 180/unit ⟶ ₹1,08,000 ₹6,18,000

CQ.10 → methods of cal. cost of inventory → FIFO ✓
Weighted Avg

FIFO → Rm → Opening 1100 kg → 1100
Purchase 10000 kg → 9100 → ∴ 900 kg Cl. stock remaining out of Rm purchased in current year
10200 kg

WN1:- No. of unit consumed
= 1100 + 10000 (-) 900
= 10,200 of Rm consumed
↳ prodn mein bheja

FIFO → Fig → Opening 1000 → 1st sold 1000
Produced 10,200 (WN2) → 2nd sold 9000
∴ Cl. stk 1200 unit is out of Cy Prodn

WN2:- No. of unit produced
Op. stk + production (-) Cl. stk = sold
1000 + x − 1200 = 10000
∴ x → 10,200

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* Cal. of Cl. stock of Fig

		₹
Raw material consumed	10,200 kg → 1100 kg → ₹ 11,000	
	9100 kg → ₹ 91,000 [₹100000/10000 x 9100]	1,02,000
+ Labour		76,500
+ Fixed OIH [₹75000/15000] x 10,200 kg		51,000
		₹ 2,29,500
∴ Cost / unit of Fg [₹ 229500 / 10,200 kg]		₹ 22.5/kg
However NRV		₹ 20/kg

75000 → 51000 → Inventory +
↳ 24000 → P&L A/c Dr.

∴ Finished goods valued at cost of NRV w.e.l
i.e 1200 unit x ₹20/unit → ₹24000

Here we assume, NRV of Fg as SP
∴ When Fg SP < cost then Rm is valued at lower of cost or replacement cost

Rm Cl. stock → cost ₹10/kg
RC ₹9.5/kg

∴ Cl. stock of Rm = 900 kg x 9.5
= ₹8550

CQ10 ⟶ methods of cal. cost of inventory ⟶ FIFO
Weighted Avg ✓

FIFO ⟶ Rm ⟶ Opening 1100 kg
Purchase 10000 kg
} ⟶ 10,200 kg consumed

WN1:- No. of unit consumed
= 1100 + 10000 (-) 900
= 10,200 of Rm consumed
↳ prodn mein bheja

FIFO ⟶ Fg ⟶ Opening 1000
Produced 10,200 (WN2)
} 10000 sold kg

WN2:- No. of unit produced
Op. Stk + production (-) Cl. Stk = Sold
1000 + x − 1200 = 10000
∴ x ⟶ 10,200

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* Cal. of Cl. stock of Fg

		₹
Raw material consumed ⟶	[₹11000 + ₹100000 / 1100kg + 10000kg] x 10,200kg ⟶	1,02,000
+ Labour ⟶		76,500
+ Fixed OIH [₹75000/15000] x 10,200kg ⟶		51,000
		₹ 2,29,500

75000 ⟶ 51000 → Inventory +
↳ 24000 → P&L A/c Dr.

∴ Cost / unit of Fg ₹ 22.51/kg
[₹229500 / 10,200 kg]

However NRV ⟶ ₹ 20/kg

∴ Finished goods valued at cost of NRV w.e.l
i.e 1200 unit x ₹20/unit ⟶ ₹24000

Here we assume, NRV of Fg as SP
∴ When Fg SP < cost then Rm is valued at lower of cost or replacement cost

Rm Cl. Stock ⟶ 11000 + 100000 / 1100 + 10000
= ₹10/kg
RC ⟶ ₹9.5/kg

∴ Cl. Stock of Rm = 900 kg x 9.5
= ₹8550

CQ11

Cost of WIP = 430 + 310

↳ FG

∴ Cost → 740

NRV → 735

750 - 2%

↳ (735) ⟶ FG

	₹
Col. of NRV of WIP ⟶ FG selling price	750
(-) FG selling exp	15
NRV of FG ⟶	735
(-) cost of completion of WIP into FG ⟶	310
NRV of WIP ⟶	425
Cost of WIP ⟶	430

∴ WIP valued @ ₹425/ unit

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