IND AS 2 – INVENTORIES

A comprehensive guide to understanding the measurement, recognition, and valuation principles for inventories under Indian Accounting Standards.

V.V Easy – 4-6 marks (not always)
CA Inter | CMA Inter Syllabus to some extent.
* only problem is little bit of Costing knowledge is required

Definition of Inventories

Inventories are assets. Ind AS 2 first clarifies that inventories are assets, not expenses. They represent future economic benefits that the entity expects to realise either by:

- selling them, or
- using them to produce goods/services that will be sold.

Inventories are classified into three categories:

① Held for Sale in the Ordinary Course of Business – Finished Goods

These are goods:

- that are already completed, and
- are ready for sale to customers in the normal business cycle.

> **Logic:** Finished goods will directly generate revenue. Therefore, their valuation directly affects profit measurement.

Examples:

- A car manufactured and ready in showroom
- Packaged FMCG products lying in warehouse

② Used in the Production Process for Such Sale – Work in Progress (WIP)

These are inventories:

- that are partially completed, and
- require further processing before becoming finished goods.

> **Logic:** Even though WIP is not saleable today, it will ultimately become finished goods. Hence, it is still an asset.

Examples:

- Cars on the assembly line
- Semi-finished garments

③ Materials or Supplies to be Consumed in the Production Process – Raw Materials

These are inventories:

- that cannot be sold as such, and
- will be consumed either:
- in manufacturing finished goods, or
- in providing services.

> **Logic:** Raw materials have no independent value on their own unless they are converted into finished goods or services.

Examples:

- Steel for manufacturing machinery
- Cotton for garments
- Medical supplies used in hospitals

Measurement of Inventories

Now comes the most important valuation logic of Ind AS 2.

Inventories are not always measured uniformly. The standard divides measurement into two branches:

A. Finished Goods or Work in Progress	B. Raw Materials

This split exists because raw materials derive their value from finished goods, whereas finished goods have independent selling value.

Measurement of Finished Goods or Work in Progress

Rule:

Finished goods and WIP are measured at the **LOWER OF:**

- Cost, or
- Net Realisable Value (NRV)

Why lower of cost or NRV?

Because:

- Cost represents what the entity has invested.
- NRV represents what the entity expects to recover.

Ind AS 2 follows the prudence (conservatism) principle:

Do not recognise unrealised gains, but recognise foreseeable losses.

So, if expected selling value falls below cost, the inventory is written down.

Measurement of Raw Materials

Raw materials are treated differently, and this is where most students get confused.

Raw materials are further divided into two cases:

1	2
Finished goods are expected to be sold at or above cost That is: Selling Price of Finished Goods ≥ Cost of Finished Goods	**Other cases (Loss situation)** That is: Selling Price of Finished Goods < Cost of Finished Goods

Case 1: Finished Goods Expected to be Sold at or Above Cost

Treatment:

➡️ Measure raw materials at **COST**

> **Logic (very important):**
>
> If finished goods will be sold at or above cost, then:
>
> - there is no expected loss in the production chain.
> - any temporary fall in raw material price is irrelevant.
>
> Raw materials will be recovered indirectly through profitable finished goods sales.

👉 Therefore, no write-down is required.

Case 2: Other Cases (Loss Situation)

Treatment:

➡️ Measure raw materials at **LOWER OF:**

- Cost, or
- Replacement Cost

Why replacement cost here?

- Replacement cost reflects the current economic value of raw materials.
- If finished goods are loss-making, it means:
- the raw materials embedded in them are not fully recoverable.
- Writing down raw materials prevents:
- deferring losses, and
- overstating assets.

This ensures loss recognition happens immediately, not later.

Note – NRV vs Fair Value Less Costs to Sell

NRV for inventories is different from fair value less costs to sell because NRV is an entity-specific value and fair value is a market-based measurement.

Logic behind this distinction:

Fair Value:

- Market-based
- Assumes a transaction between market participants
- Ignores entity-specific advantages

NRV:

- Entity-specific
- Considers:
- existing contracts
- entity's selling strategy
- actual costs the entity will incur

👉 Inventory valuation focuses on what **THIS entity** will realise, not what the market could realise.

Example: NRV vs Fair Value

An entity holds 500 units of inventory.

- Market selling price = ₹20 per unit
- Entity has an order in hand to sell at ₹22 per unit
- Incremental selling cost = ₹1 per unit

₹20	₹21
Fair Value	NRV
per unit (market-based)	₹22 – ₹1 = ₹21 per unit

Conclusion:

Even though market price is lower, the entity will actually realise ₹21 because of the confirmed order.

👉 Hence, **NRV ≠ Fair Value less costs to sell**

Cost of Inventories

The cost of inventories consists of three components:

Cost of Purchase	Cost of Conversion	Other costs incurred in bringing the inventory to their present location and condition

> **Underlying logic:**
>
> Only those costs are included which:
>
> - create the inventory, or
> - bring it to a saleable/usable condition
>
> Any cost beyond this purpose is excluded.

Cost of Purchase

Cost of purchase includes all costs incurred to acquire inventories and bring them into the business.

Cost of Purchase – Table (Reproduced as it is)

Particulars	Amount
Purchase Price (Net of Trade Discount and Rebates)	XX
Add: Duties and Taxes (Non-refundable)	XX
Add: Transport (Freight) & Handling Charges	XX
Add: Other expenditure directly attributable to the acquisition (For Eg: Insurance on Purchase, Brokerage to Indenting Agent (Buying Commission))	XX
Cost of Purchase	**XX**

Logic Behind Each Item in Cost of Purchase

Purchase price (net of trade discount & rebates)

Trade discounts and rebates are not costs, they reduce the purchase price itself. Only the net amount actually payable represents cost.

Non-refundable duties and taxes

If tax cannot be recovered, it becomes part of inventory cost because it increases acquisition cost permanently.

Freight and handling charges

These are necessary to bring inventory to the business premises.

Other directly attributable costs

Only costs directly linked to acquisition are included (insurance during transit, buying commission).

👉 **Core principle:** If the cost would not have been incurred "but for" acquiring the inventory, include it.

Cost of Conversion

Cost of conversion relates to transforming raw materials into finished goods.

Structure of Cost of Conversion

Cost of Conversion is divided into:

Direct Costs	Indirect Costs

Direct Costs

Direct Labour – Actuals

- Direct labour includes wages and benefits of workers directly involved in production.
- Always taken at actual cost incurred.

> **Logic:** Direct labour has a direct, traceable relationship with units produced, so no allocation complexity exists.

Indirect Costs

Indirect costs are those not directly traceable to individual units, but necessary for production.

Indirect costs are divided into:

Fixed Production Overheads	Variable Production Overheads

Fixed Production Overheads

Fixed production overheads are indirect manufacturing costs that remain constant irrespective of production level.

Examples:

- Factory rent
- Factory manager salary
- Depreciation of plant

Allocation logic based on capacity:

Case 1: Actual Production > Normal Capacity

➡️ Use Actual Production

Case 2: Actual Production < Normal Capacity

➡️ Use Normal Capacity

Fixed Overhead Recovery Rate

Fixed OH Recovery Rate = Total Fixed Overheads ÷ Normal or Actual Production, whichever is higher

Eg FOH

Total FOH = 900 000

Normal prod = 50000 units

Actual prod = 40000

Actual prod 60000

FOH / unit

Normal prod = 900000 / 50000 = 18 / unit ✓

Actual prod = 900000 / 40000 = 22.5 / unit ✗

Cost Sheet ⇒ + 22.50 ✗ over valued Inventory

FOH / unit

Normal prod = 900000 / 50000 = 18 / unit ✗

Actual prod = 900000 / 60000 = 15 / unit ✓

FOH absorbed = 40000 x 18
= 720000

Unabsorbed FOH = 900000 − 720000
(like under absorption of OH) = 120000 (Trfd to P/L)

FOH absorbed = 60000 x 15
= 900000
(Different from Costing)

Why "Whichever is Higher"?

- To avoid overloading inventory with fixed costs when production is low.
- To prevent artificial inflation of inventory value.
- To ensure idle capacity losses are not capitalised.

Special Rule

In case where Actual Production < Normal Capacity, unabsorbed fixed overheads (Total Fixed Overheads – Absorbed Fixed Overheads) are charged to P&L during the period.

Logic:

- Lower production is often due to inefficiency, under-utilisation, or market slowdown.
- These are period costs, not inventory costs.
- Hence, the unabsorbed portion is expensed immediately.

Variable Production Overheads

Variable production overheads:

- Vary directly with production volume
- Examples: indirect materials, power, indirect labour

Treatment:

➡️ Always charged at **ACTUALS**

Logic: Since they vary with production, they naturally get absorbed in proportion to actual output.

Other Costs

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

> **Logic:**
>
> - If design cost is essential to make the product saleable, it becomes part of inventory cost.
> - Generic or marketing designs would not qualify.

Exclusions from Cost of Inventories

The following costs are specifically excluded, even though they may be related to business operations:

- **Abnormal amount of wasted materials, labour or other production cost (Abnormal loss)**

  Logic: Abnormal losses do not create future economic benefits → expense immediately.

- **Storage cost unless those are necessary in the production process prior to a further production stage**

  Logic: Normal storage after production = period cost; Mandatory storage (e.g., aging of wine, cheese) = inventory cost

- **Administrative overheads that do not contribute to bringing the inventories to their present location and condition**

  Logic: Office expenses do not improve inventory's condition or readiness for sale.

- **Selling and distribution cost**

  Logic: Selling costs relate to realisation of revenue, not creation of inventory.

- **Interest costs / Loan raising fees on loan taken to purchase or produce the inventories (unless it is a Qualifying Asset as per Ind AS 23)**

  Logic: Normally, borrowing costs are finance costs. Only capitalised when inventory takes substantial time to get ready for sale (qualifying asset).

Note: Inventory Acquired on Deferred Settlement Terms

(Payment beyond normal credit terms)

This note applies only when payment is deferred beyond normal credit period.

Extra amount paid over the Normal Purchase Price (Cash Price) is recognised as interest expense over the credit period and not included in the cost of inventories.

> **Logic:**
>
> - Inventory should be measured at cash price equivalent.
> - The excess paid due to delayed payment represents time value of money, not inventory cost.
> - Therefore, that excess is treated as finance cost, not inventory cost.

If Normal Purchase price is not given, it is calculated by discounting the future payments (i.e. Present Value of Cash Outflows).

This ensures:

- inventory is not overstated, and
- finance cost is recognised over time.

Allocation of Cost to Joint Products & By-Products

A production process may result in more than one product being produced simultaneously. This is the case when joint products are produced or when there is a main product & a by-product.

> **Logic:**
>
> - In many industries, outputs are inseparable up to a split-off point.
> - Costs incurred before split-off cannot be directly identified with individual products.
> - Hence, allocation becomes necessary.

Joint Products

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

Allocation may be based on relative sales value of each product either at the stage in the production process when products become separately identifiable or at the completion of production.

(Allocation in Ratio of Sales Value of Unit Produced i.e. Units Produced × S.P. per unit)

> **Logic (why sales value basis?):**
>
> - Sales value reflects economic importance of each product.
> - Allocation becomes:
> - rational (linked to benefit),
> - consistent (applied year after year),
> - exam-defensible.

👉 **Cost follows value creation, not physical quantity.**

By-Product

Most by-products are of immaterial value and therefore they are measured at net realisable value.

NRV of by-product is deducted from cost of conversion.

Net cost of conversion (i.e. cost of conversion – NRV) is distributed among main products.

> **Logic:**
>
> - By-products are incidental outputs, not primary objectives.
> - Tracking full cost separately is uneconomical and unnecessary.
> - Deducting NRV:
> - avoids overstating cost of main product,
> - keeps accounting simple and practical.

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Eg Joint product

Total Costs = RM + labour + OH = 600000

	Product A	Product B
	units 2000	units 1000
	S.P/unit 10	S.P/unit 15
Sale value of units Produced	2000 × 10 = 20000	1000 × 15 = 15000
Ratio	4 :	3
Allocation of 600000 in ratio of 4:3	342857	257143
Cost pu unit	171.43	257.14

Cost of Agricultural Produce Harvested from Biological Assets

Such inventories are measured on initial recognition at their fair value less costs to sell at the point of harvest.

This will become the cost of the inventories at that date for application of Ind AS 2.

> **Logic:**
>
> - Agricultural produce undergoes biological transformation, not manufacturing.
> - Fair value at harvest best reflects:
> - condition of asset, and
> - economic value at that point.
> - After harvest, normal Ind AS 2 rules apply using that value as cost.

Cost Formulas (Historical Cost Methods)

For items that are not ordinarily interchangeable	For other items
Specific Identification of Cost Method: Specific costs are attributed to identified items of inventory	FIFO: Inventory which were purchased or produced first are sold or consumed first. OR Weighted Average Method: Weighted average of cost of similar items Cost per unit = (Total Cost / Total Units)

Logic:

- Specific identification is used when items are: unique, high value, individually traceable.
- FIFO / Weighted Average are used where: items are interchangeable, physical tracking is impractical.

TECHNIQUES FOR MEASUREMENT OF COST (Non-Historical Cost Methods)

(May be used for convenience if results approximate actual cost)

Logic of this heading (why this exists):

Ind AS 2 primarily relies on historical cost methods (FIFO, WAM, Specific Identification). However, in certain industries:

- tracking actual cost unit-by-unit is impractical,
- volumes are huge,
- items change rapidly.

Hence, approximation techniques are permitted only if they reasonably approximate actual cost. They are not shortcuts, but practical substitutes.

Techniques for Measurement of Cost – Table

Standard Cost Method	Retail / Adjusted Selling Price Method
Takes into account normal levels of consumption of materials and supplies, labour, efficiency & capacity utilisation.	Often used in the retail trade for measuring inventories of large numbers of rapidly changing items that have similar margins. Inventory = Sales value of inventory – GP %

Logic

Standard Cost Method

- Uses pre-determined benchmarks.
- Variances (actual vs standard) are analysed separately.
- Useful in manufacturing environments with stable processes.

Retail Method

- Starts from selling price.
- Reduces gross profit margin to arrive at cost.
- Common in retail chains, apparel stores, supermarkets.

Entity shall use same cost formula for all inventories having similar nature and use. For inventories with different nature or use, different cost formulas may be justified.

Logic: Prevents profit manipulation by selectively choosing cost methods. Ensures comparability and consistency. Flexibility allowed only when inventories are economically different.

NET REALISABLE VALUE (NRV)

NRV Table

Particulars	Amount
Estimated Selling Price	XX
Less: Estimated cost of completion (For WIP) (E.g. Processing & Packing Charges)	(XX)
Less: Estimated selling expenses (E.g. Sales Commission)	(XX)
NRV	**XX**

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Logic of NRV computation:

NRV represents net cash inflow expected from inventory, not gross selling price. All future unavoidable costs must be deducted.

Note on NRV Calculation

1. Comparison between Cost and NRV should be made item by item basis. However, if items of inventory relate to same product line that have similar purposes are produced & marketed in same geographical area then grouping can be done.
2. In case of firm/committed contract of sale, NRV shall be calculated at contract price.
3. NRV is calculated on the basis of expected date for sale of such inventory.
4. It is based on the most reliable evidence available at the time the estimates are made. These estimates take into consideration price fluctuations occurring after the balance sheet date to extent that such events confirm conditions existing at the end of period.

> **Logic (exam-critical):**
>
> - Item-wise comparison avoids netting losses with gains.
> - Contract price overrides market price because it reflects entity-specific recoverability.
> - Subsequent price changes are considered only if they confirm year-end conditions.

Example: NRV Calculation & Recognition as Expense

Example

If an entity has 1,000 items of 'P' at the balance sheet date: NRV of these items on the balance sheet date is ₹ 90 and same goods are sold after the balance sheet date and before the approval of financial statements at ₹ 70, the entity should consider ₹ 70 as NRV for comparing with the cost of inventory.

> **Logic:** Post balance sheet sale at ₹70 confirms that ₹90 was over-estimated. Hence, ₹70 becomes the most reliable evidence.

Recognition as an Expense

Point 1: The amount of inventories recognised as an expense in the period will generally be carrying amount of inventory sold in the period in which revenue (sales) is recognised and amount of any write down of inventories to NRV.

Point 2: Inventory is used in construction of PPE: Carrying Amount of Inventory is allocated to PPE & will be recognised as an expense in P&L (through depreciation) over PPE's useful life.

Logic: Inventory expense follows revenue recognition, not purchase. When inventory becomes part of PPE, cost flows through depreciation, not immediately.

Point 2 Eg Cement Company using it for building Construction.

Eg Cost 500 NRV 600 Value = 500

Cost 500 NRV 450 Value = 450

↓

Write down by 50

P/L 50
To Inventory 50

Next year (Reversal of write down)

Carrying amt = 450 NRV = 600

Inventory 50
To P/L A/c 50

Revised amt = 450 + 50
= 500

Eg: Inventory, Cost = 1000, Sale = 1400 (Revenue Recognition basis)

~~Bank A/c Dr 1400~~
~~To Inventory 1000~~
~~To P/L 400~~

Bank 1400
To Sales 1400

COGS 1000
To Inventory 1000

P/L

COGS	1000	Sales	1400
	300		

Reversal of Write-Down

Reversal of write down is permitted maximum to the extent of loss previously booked, only when circumstances of write down below cost no longer exist or when there is clear evidence of increase in NRV.

Logic: Prevents creation of artificial profits. Inventory can never be written above original cost. Reversal is allowed only to restore true economic value, not to recognise gains.