FAR-1 — FINANCIAL ACCOUNTING & REPORTING 1

Topic: PROPERTY, PLANT & EQUIPMENT — IAS 16

1 TOPIC OVERVIEW

WHAT IS IT?
Tangible items held for use in production/supply of goods or services, rental, or admin purposes, and expected to be used for more than one period.

WHY IMPORTANT?
PPE is usually the largest asset class on the SFP. Recognition, depreciation & revaluation rules directly affect profit, equity and asset values every year.

CORE PRINCIPLE
Cost is capitalised only while bringing the asset to working condition; thereafter its cost (less residual value) is systematically expensed as depreciation over its useful life.

2 KEY DEFINITIONS

PPE: Tangible items held for use (production/supply/rental/admin) & used for > 1 period.

Cost: Cash/cash-equivalent paid, or FV of other consideration given, to acquire an asset.

Depreciation: Systematic allocation of depreciable amount over useful life.

Depreciable amount: Cost (or revalued amount) less residual value.

Residual value: Estimated amount obtainable now from disposal, if asset were already of the age/condition expected at end of useful life.

Useful life: Period an asset is expected to be available for use, OR expected output/production units.

Accumulated depreciation: Cumulative depreciation charged to date — a contra-asset account.

Carrying amount (NBV/WDV): Cost or revalued amount – accumulated depreciation – accumulated impairment.

Class of PPE: Grouping of assets of similar nature/use — e.g. land, buildings, plant, vehicles, fixtures.

3 RECOGNITION CRITERIA — DECISION TREE

Expenditure incurred on an item with PPE-like characteristics

▼

Condition A
Probable future economic benefits will flow to the entity

Condition B
Cost can be measured reliably

▼ BOTH satisfied ▼

✔ **RECOGNISE as PPE (capitalise)**

SPECIAL CASES — STILL RECOGNISE

- Safety/environmental assets — qualify if they let the entity derive benefits from *other* related assets (e.g. chemical-handling safety plant).
- Major spare parts & stand-by equipment used for > 1 period.
- Spare parts usable only with a specific PPE item.

EXCEPTIONS — DO NOT RECOGNISE AS PPE

- Minor spare parts/servicing equipment (normal case) → inventory, expensed on consumption.
- Immaterial items (practical expedient) e.g. staplers, calculators — expensed even if criteria technically met.

4 INITIAL MEASUREMENT — COST

COST OF PPE

Purchase price (net of discounts) + Directly attributable costs + Initial estimate of dismantling & restoration costs

✔ INCLUDED IN COST

- Purchase price less trade discounts/rebates, plus non-refundable taxes/duties
- Employee costs from installation/construction
- Site preparation cost
- Initial delivery & handling costs
- Installation & assembly costs
- Testing costs (to check the asset functions properly)
- Professional fees (architect, surveyor)
- Estimated dismantling/site-restoration cost (legal/constructive obligation) — at present value

✘ EXCLUDED FROM COST — EXPENSE INSTEAD

- Costs of opening a new facility
- Costs of introducing a new product/service (incl. advertising)
- Costs of conducting business in a new location/new customer class (incl. staff training)
- Administration & general overheads
- Costs once asset is ready for use but not yet brought into use, or run below full capacity
- Initial operating losses
- Costs of relocating operations
- Income/expense of incidental operations (e.g. using site as car park before construction) → P&L, not cost

EXCHANGE TRANSACTIONS [IAS 16: 24–26]

Asset acquired in exchange for another asset → measured at **fair value** UNLESS (a) the exchange lacks commercial substance, or (b) FV of neither asset given nor received is reliably measurable. If FV cannot be used → cost = carrying amount of asset given up. Recognition of cost **ceases** once the asset is in the location/condition necessary to operate as intended by management — later costs (relocation, idle time, initial losses) are never added. Sale proceeds & costs of samples produced while testing are recognised in **profit or loss**, not netted against cost.

SUBSEQUENT MEASUREMENT & DEPRECIATION

5 SUBSEQUENT EXPENDITURE — CAPITALISE OR EXPENSE?

DAY-TO-DAY SERVICING	Repairs & maintenance → **expense** in P&L as incurred.
IMPROVES ASSET	Enhances performance or extends useful life → **capitalise**.
REPLACEMENT PART	New part **capitalised**; carrying amount of the replaced part is **derecognised** (regardless of separate depreciation history).
MAJOR INSPECTION/OVERHAUL	Cost **capitalised**; carrying amount of the previous inspection/overhaul cost is **derecognised**.

6 MEASUREMENT AFTER RECOGNITION — TWO MODELS (policy per class of PPE)

Model	Carrying amount formula	Key notes
Cost model	Cost – Accumulated depreciation – Accumulated impairment	Default; simplest; no revaluation gains recorded
Revaluation model	Fair value at date – Subsequent accumulated depreciation – Subsequent accumulated impairment	Requires reliable FV measurement; applied to **entire class**; see Page 3

7 DEPRECIATION — 4 CALCULATION METHODS

① STRAIGHT LINE
Depreciation = (Cost – Residual Value) ÷ Useful Life

② REDUCING BALANCE
Rate = $1 - \sqrt[n]{(\text{Residual Value} \div \text{Cost})}$; Depreciation = NBV × Rate

③ UNITS OF PRODUCTION
Rate/unit = (Cost – RV) ÷ Total Est. Units; Depreciation = Units Used × Rate

④ SUM OF DIGITS
Depreciation = Depreciable Amount × (Remaining Years ÷ Sum of Years' Digits) [Sum = n(n+1)/2]

METHOD SELECTION & RULES

- Method chosen must reflect the pattern in which the asset's economic benefits are consumed — a method based on **revenue** generated is NOT appropriate.
- Reviewed at least every year-end; if consumption pattern changes significantly → change method (treated as a change in accounting estimate, applied prospectively over remaining useful life).
- Useful life & residual value also reviewed yearly — if revised, depreciate remaining carrying amount (less any revised residual value) over the revised remaining life.
- Journal entry: **Dr Depreciation expense (P&L)** / **Cr Accumulated depreciation**.

8 DEPRECIATION — TIMING & SPECIAL CASES

STARTS	When asset is available for use (location/condition ready) — may be earlier than actually being used.
STOPS	When asset is derecognised/disposed of (or, under cost model, when fully depreciated) — **never** stops merely because asset is idle.
IF freehold land	Not depreciated (unlimited useful life). Leasehold land & land improvements (car parks, landscaping) ARE depreciated.
IF asset idle/no output	Still depreciate under time-based methods; under units-of-production, charge can be zero if no output.
IF residual value > carrying amount	No depreciation charged.
IF fully depreciated, still used	No further depreciation (already at residual value).
IF significant parts	Depreciate each significant part separately (e.g. aircraft airframe vs engines).

9 CALCULATION ROADMAP — DEPRECIATION QUESTIONS

1 Identify cost, RV, useful life → 2 Identify correct method → 3 Compute depreciable amount → 4 Apply pro-rata for part-year → 5 Dr Depreciation / Cr Acc. Dep. → 6 Update NBV for SFP

DERECOGNITION & THE REVALUATION MODEL

10 DERECOGNITION — DISPOSAL CALCULATIONS

GAIN / (LOSS) ON DISPOSAL
Net disposal proceeds – Carrying amount at disposal date

NET DISPOSAL PROCEEDS
Cash received + New asset received* – Cash paid* – Disposal costs (*if exchange)

Gain/loss recognised in **profit or loss** (gain is presented as **other income**, never as revenue). Derecognised on disposal, or when no further economic benefits are expected from use/disposal.

11 JOURNAL ENTRIES — DISPOSAL (COMBINED ENTRY)

Account	Dr	Cr
Accumulated depreciation (asset disposed)	✓	
Bank / Receivable (cash proceeds)	✓	
PPE — new asset (if exchange)	✓	
Loss on disposal (P&L) — balancing if short on Dr side	✓	
PPE — old asset (at cost)		✓
Cash — disposal costs paid		✓
Cash paid in part-exchange		✓
Gain on disposal (P&L) — balancing if short on Cr side		✓

Alternative method: post through a temporary **Disposal Account** — Dr cost transferred out, Cr accumulated depreciation transferred in, Dr/Cr proceeds and costs; balancing figure = gain (Cr) or loss (Dr) to P&L.

12 REVALUATION MODEL — CONDITIONS & MECHANICS

RELIABLE MEASUREMENT
Fair value of the item must be measurable reliably (not necessarily market-based).

SUFFICIENT REGULARITY
Revalue whenever FV differs materially from carrying amount — annually for volatile items; every 3–5 years for stable items.

CLASS-WISE APPLICATION
If one asset in a class is revalued, the **entire class** must be revalued.

Step 1 — Eliminate old accumulated depreciation		
Accumulated depreciation	✓	
Asset (PPE)		✓
Step 2 — Record the gain or loss (bring asset to fair value)		
Asset (PPE) [if FV > carrying amount] / Loss on revaluation [if FV < CA]	✓	
Gain on revaluation [if FV > CA] / Asset (PPE) [if FV < CA]		✓

After revaluation, depreciation is recalculated on the **new (revalued) amount** over the remaining useful life.

13 RECOGNITION OF REVALUATION GAIN/LOSS — 5 SCENARIOS

① **Carried at cost, revalued UP**	Increase → **Other Comprehensive Income**, accumulated in equity as **Revaluation Surplus**.
② **Carried at cost, revalued DOWN**	Decrease → **Profit or Loss** in full.
③ **Has surplus, revalued DOWN**	Decrease → OCI first, up to the existing revaluation surplus balance for that asset (reduces surplus); any **excess** → P&L.
④ **Has deficit, revalued UP**	Increase → P&L first, to the extent it reverses the previously recognised loss *net of the depreciation effect*; any **excess** → OCI (surplus).
⑤ **Realisation of surplus**	Optional transfer **Dr Revaluation surplus / Cr Retained earnings** — via "incremental depreciation" (revalued dep. – original-cost dep.) each year, OR in full on disposal. Recorded in Statement of Changes in Equity, **not** P&L.

14 FINANCIAL STATEMENT IMPACT

STATEMENT OF PROFIT OR LOSS

- Depreciation expense (unless capitalised into another asset)
- Loss on revaluation (downward, per scenarios ② ③ excess ④ reversal)
- Gain/(loss) on disposal — gain shown as other income, not revenue

STATEMENT OF FINANCIAL POSITION

- PPE — non-current asset, at carrying amount (cost or revalued – acc. dep. – acc. impairment)
- Revaluation surplus — within equity / OCI reserves
- Retained earnings — increased by realised surplus transfers

DISCLOSURE, EXAM STRATEGY & QUICK RECAP

15 DISCLOSURE REQUIREMENTS (per major class of PPE)

GENERAL [IAS 16:73]

- Measurement basis used (cost or revaluation)
- Depreciation method(s) used
- Useful lives or depreciation rates
- Gross carrying amount & accumulated depreciation (opening & closing)
- Reconciliation of opening→closing: additions, disposals, depreciation charge, revaluation/impairment movements

CIRCUMSTANCE-SPECIFIC & REVALUED ASSETS

- Restrictions on title; assets pledged as security
- Expenditure on assets under construction
- Contractual commitments to acquire PPE
- Effective date of revaluation; whether an independent valuer was used
- Carrying amount if the cost model had been used instead
- Revaluation surplus — movement for the period & distribution restrictions

16 COMMON EXAM QUESTION PATTERNS

Conceptual: Recognition criteria, class-wise revaluation, definitions (MCQs).

Calculation-based: Depreciation under 4 methods; cost of asset build-up.

Adjustment-based: Change in useful life/RV/method mid-life.

Journal-entry: Disposal, exchange, revaluation up/down.

Financial-statement: SFP note reconciliation; SPL/OCI presentation.

Scenario/application: Multi-year revaluation history combining P&L + OCI treatment.

! ⚠ EXAM TRAPS — COMMON MISTAKES

- **Adding** admin overheads, staff training, or advertising costs into PPE cost — these are **always expensed**.
- **Forgetting** to deduct trade discounts before capitalising purchase price.
- Confusing **recognition** (probable benefit + reliable measurement) with **measurement** (what's included in cost) — they are tested separately.
- Treating **depreciation as a fall in value** — it is cost allocation, not a valuation exercise (that's impairment).
- Depreciating **freehold land**, or forgetting to depreciate **leasehold land**/land improvements.
- Wrong **Dr/Cr** on revaluation: forgetting to eliminate old accumulated depreciation before recording the gain/loss.
- Recognising a revaluation **increase in P&L** instead of OCI when there is no prior deficit to reverse (scenario ① vs ④ confusion).
- Recognising a revaluation **decrease fully in P&L** when a surplus balance already exists for that asset (should go to OCI first — scenario ③).
- Confusing **capital expenditure** (capitalise: improvements, replacements, major overhauls) with **revenue expenditure** (expense: day-to-day repairs).
- **Current vs non-current** confusion: PPE is always non-current; only assets held for resale are inventory (current).
- Forgetting that **gain on disposal** is "other income," never revenue.
- Missing the **pro-rata (months/12)** adjustment for assets acquired/disposed mid-year.

17 QUICK DECISION TREE — ANSWERING ANY IAS 16 QUESTION

1 Question given → 2 Identify case type (recognition / depreciation / disposal / revaluation) → 3 Apply the rule → 4 Calculate → 5 Adjust (pro-rata / surplus / part-exchange) → 6 Journal entry → 7 FS effect (SPL/OCI/SFP) → ✔ Final answer

IAS 16 — PROPERTY, PLANT & EQUIPMENT IN 60 SECONDS

Recognise if: probable future benefit + cost reliably measurable.

Cost = purchase price + directly attributable costs + dismantling PV. Excludes admin, training, advertising.

Depreciate: (Cost – RV) over useful life — SL / Reducing Balance / Units of Production / Sum of Digits. Never depreciate freehold land.

Two models: Cost (Cost – Acc.Dep – Acc.Imp) or Revaluation (FV – Subsequent Acc.Dep – Acc.Imp), applied class-wise.

Revaluation up → OCI (surplus). **Down** → P&L, unless surplus exists (use it first).

Disposal gain/loss = Net proceeds – Carrying amount → P&L (gain = other income).

Journal (dep.): Dr Depreciation / Cr Acc. Dep.

Journal (revaluation): Dr Acc.Dep / Cr Asset (eliminate); then Dr/Cr Asset vs Gain/Loss.

Disclose: basis, method, useful life, gross cost + acc.dep. reconciliation, revaluation details.