Property, Plant and Equipment (IAS 16)

A complete last-minute revision map: recognition & cost, improvements vs repairs, all four depreciation methods, acquisition journal entries, and the financial statement effect — exactly as tested in PRC-1.

Cost Recognition | 4 Depreciation Methods | Improvements vs Repairs | Acquisition Journal Entries

1 CORE CONCEPT

> *Property, plant and equipment are tangible items expected to be used for more than one accounting period, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.*

Acquired at Cost → Depreciated over Useful Life → Carried at Cost − Accumulated Depreciation

Presented in the statement of financial position at **cost less accumulated depreciation** — never above cost.

2 KEY DEFINITIONS

Depreciation
The accounting method of allocating the depreciable amount of a tangible asset over its useful life.

Carrying Amount
Cost less accumulated depreciation to date — the value presented in the statement of financial position.

Accumulated Depreciation
Cumulative depreciation charged against an asset since acquisition.

3 IMPORTANT ACCOUNTING RULES — COST RECOGNITION

✓ INCLUDE in Cost

Purchase price
After import duties, less trade discounts & rebates

Wages for construction/acquisition
Directly attributable labour

Site preparation costs
Material & labour to prepare the site

Delivery, handling, installation, testing
Bringing the asset to working condition

Professional fees
e.g. architect & surveyor fees

✗ EXCLUDE from Cost

Future maintenance/warranty contracts
Relate to future services, not acquisition

Staff training costs
Not directly attributable to the asset itself

Costs unrelated to the asset
e.g. unconnected modifications elsewhere

Routine repairs after acquisition
Expensed, not capitalised

3B SUBSEQUENT EXPENDITURE — IMPROVEMENTS VS REPAIRS

✓ CAPITALISED — Improvement

Expenditure that **enhances performance** or **extends useful life** beyond the asset's original specification. Added to the cost of the asset.

✗ EXPENSED — Repair

Expenditure that merely **restores** an asset to its original working condition, with no enhancement. Recognised as an expense in the period.

4 FORMULAS — THE FOUR DEPRECIATION METHODS

STRAIGHT LINE

```
Dep = (Cost − RV) ÷ Useful Life
```

Even charge every year of the asset's life.

REDUCING BALANCE

```
Rate = 1 − ⁿ√(RV ÷ Cost)
Dep = NBV × Rate
```

Higher charges early, declining over time.

UNITS OF PRODUCTION

```
Rate/unit = (Cost − RV) ÷ Life in units
Dep = Units used × Rate
```

Charge linked directly to actual usage.

SUM OF DIGITS

```
Sum = n(n+1) ÷ 2
Dep = Deprec. Amt × (Remaining Yrs ÷ Sum)
```

Progressively smaller charge each year.

5 ACCOUNTING TREATMENT — ACQUISITION JOURNAL ENTRIES

PAYMENT MADE IN CASH

```
Dr  Non-current assets
  Cr  Cash / Bank
```

PAYMENT MADE IN ARREARS

```
Dr  Non-current assets
  Cr  Payable to Vendor
```

PAYMENT IN ADVANCE (at date of payment)

```
Dr  Advance to Vendor (Receivable)
  Cr  Cash / Bank
```

PAYMENT IN ADVANCE (at date asset is recognised)

```
Dr  Non-current assets
  Cr  Advance to Vendor (Receivable)
```

Note: the advance is an asset — but it is **not depreciated** until the actual asset is recognised.

6 STEP-BY-STEP ROADMAP — SOLVING DEPRECIATION

1. **Identify the depreciable amount**
   Cost − Residual Value.
2. **Identify the method required**
   Straight line, reducing balance, units of production, or sum of digits.
3. **Apply the correct formula**
   Use the method-specific formula — never mix bases between methods.
4. **Check for a partial year**
   Pro-rate by months held if acquired mid-year.

8 LEDGER TREATMENT — ACCUMULATED DEPRECIATION

ACCUMULATED DEPRECIATION	
DEBIT (Dr)	**CREDIT (Cr)**
Reduces the balance — e.g. on disposal of the related asset	Annual depreciation charge for the period

Depreciation entry each period:

```
Dr  Depreciation Expense
  Cr  Accumulated Depreciation
```

9 FINANCIAL STATEMENT EFFECT

↓ **Depreciation charge**
Expensed in the income statement → reduces profit each period

= **Accumulated depreciation**
A contra-asset — deducted from cost in the SOFP to give carrying amount

↑ **Capitalised improvement**
Increases the asset's carrying amount — no immediate profit effect

A repair, by contrast, is expensed immediately and **reduces profit** in the period incurred.

10 COMMON EXAM CASES — DECISION TREE

IF cost enhances asset	→ Capitalise as an improvement
IF cost restores condition	→ Expense as a repair
IF paid in advance	→ Recognise as a receivable, not depreciated yet
IF purchased mid-year	→ Pro-rate depreciation for months held
IF estimate revised	→ Apply prospectively over remaining life only

11 COMMON MISTAKES / EXAM TRAPS

Trap: Capitalising a warranty or training cost
These relate to future services, not to bringing the asset to working condition — always excluded from cost.

Trap: Confusing repair with improvement
A repair restores; an improvement enhances or extends life. Read the scenario carefully for words like "restore" vs "upgrade/extend".

Trap: Using full cost instead of depreciable amount
Straight-line and units of production both require Cost − Residual Value, not cost alone.

Trap: Depreciating the advance payment
An advance to a vendor is a receivable — it is not depreciated until the actual asset is recognised.

★ QUICK EXAMPLE — REDUCING BALANCE METHOD

SCENARIO

Plant bought for Rs. 100,000, expected useful life 5 years, residual value Rs. 10,000. Depreciated using the reducing balance method.

CALCULATION

```
Rate = 1 − ⁵√(10,000 ÷ 100,000) ≈ 36.9%
Year 1 Depreciation = 100,000 × 36.9% = Rs. 36,900
```

RESULT

Carrying amount at end of Year 1 = 100,000 − 36,900 = **Rs. 63,100**.

RECOGNITION RULE
Cost = purchase price + all directly attributable costs of bringing the asset to working condition.

SUBSEQUENT SPEND
Enhances/extends life → capitalise. Restores condition → expense.

FOUR METHODS
Straight line, reducing balance, units of production, sum of digits — each with its own formula.

SOFP PRESENTATION
Always shown at cost less accumulated depreciation — the carrying amount.