INDIAN ACCOUNTING STANDARDS MADE EASY

(IND AS) 16
PROPERTY, PLANT AND EQUIPMENT

BY,

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OBJECTIVES

- PRESCRIBE THE ACCOUNTING TREATMENT FOR PROPERTY, PLANT AND EQUIPMENT
- RECOGNITION OF THE ASSETS
- DETERMINATION OF THEIR CARRYING AMOUNTS
- DEPRECIATION CHARGES AND IMPAIRMENT LOSSES TO BE RECOGNISED IN RELATION TO THEM.

BUT…

THIS STANDARD SHALL BE APPLIED IN ACCOUNTING FOR PROPERTY, PLANT AND EQUIPMENT **EXCEPT** WHEN ANOTHER STANDARD REQUIRES OR PERMITS A DIFFERENT ACCOUNTING TREATMENT.

DON'T INCLUDE…

- CLASSIFIED AS HELD FOR SALE IN ACCORDANCE WITH IND AS 105, NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS.
- EXPLORATION AND EVALUATION ASSETS (SEE IND AS 106).
- MINERAL RIGHTS AND MINERAL RESERVES SUCH AS OIL, NATURAL GAS AND SIMILAR NON-REGENERATIVE RESOURCES.
- OTHER INDIAN ACCOUNTING STANDARDS MAY REQUIRE. FOR EXAMPLE, IND AS 17, LEASES, REQUIRES AN ENTITY TO EVALUATE ITS RECOGNITION OF AN ITEM OF LEASED PROPERTY, PLANT AND EQUIPMENT ON THE BASIS OF THE TRANSFER OF RISKS AND REWARDS.
- INVESTMENT PROPERTY IN ACCORDANCE WITH IND AS 40, INVESTMENT PROPERTY, SHALL USE THE COST MODEL IN THIS STANDARD.

DEFINITIONS

bearer plant

Cost

impairment loss

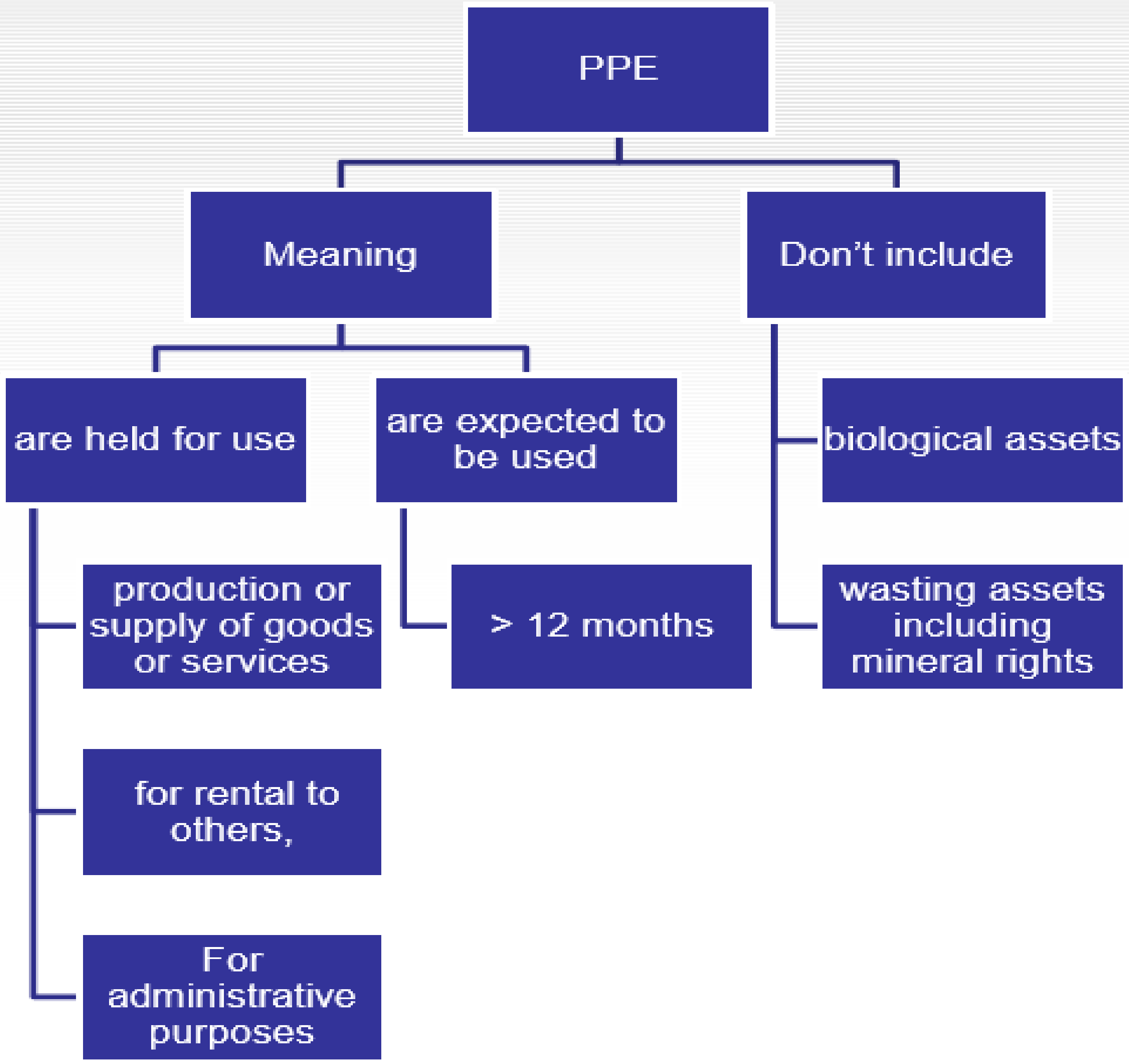
Recoverable amount

Depreciable amount

PPE

residual value

Useful life


PPE
Meaning
Don't include
are held for use
are expected to be used
biological assets
production or supply of goods or services
> 12 months
wasting assets including mineral rights
for rental to others,
For administrative purposes

RECOGNITION

THE COST OF AN ITEM OF PROPERTY, PLANT AND EQUIPMENT SHALL BE RECOGNISED AS AN ASSET IF, AND ONLY IF:

(A) IT IS PROBABLE THAT FUTURE ECONOMIC BENEFITS ASSOCIATED WITH THE ITEM WILL FLOW TO THE ENTITY; AND

(B) THE COST OF THE ITEM CAN BE MEASURED RELIABLY.

AND…

- SPARE PARTS, STAND-BY EQUIPMENT AND SERVICING EQUIPMENT
- DOES NOT PRESCRIBE THE UNIT OF MEASURE FOR RECOGNITION, IE WHAT CONSTITUTES AN ITEM OF PROPERTY, PLANT AND EQUIPMENT
- AT THE TIME THEY ARE INCURRED

- INITIAL COSTS
- SUBSEQUENT COSTS

MEASUREMENT AT RECOGNITION

THE COST OF AN ITEM OF PROPERTY, PLANT AND EQUIPMENT COMPRISES:

(A) ITS PURCHASE PRICE, INCLUDING IMPORT DUTIES AND NON-REFUNDABLE PURCHASE TAXES, AFTER DEDUCTING TRADE DISCOUNTS AND REBATES.

(B) ANY COSTS DIRECTLY ATTRIBUTABLE TO BRINGING THE ASSET TO THE LOCATION AND CONDITION NECESSARY FOR IT TO BE CAPABLE OF OPERATING IN THE MANNER INTENDED BY MANAGEMENT.

(C) THE INITIAL ESTIMATE OF THE COSTS OF DISMANTLING AND REMOVING THE ITEM AND RESTORING THE SITE ON WHICH IT IS LOCATED, THE OBLIGATION FOR WHICH AN ENTITY INCURS EITHER WHEN THE ITEM IS ACQUIRED OR AS A CONSEQUENCE OF HAVING USED THE ITEM DURING A PARTICULAR PERIOD FOR PURPOSES OTHER THAN TO PRODUCE INVENTORIES DURING THAT PERIOD.

EXAMPLES OF DIRECTLY ATTRIBUTABLE COSTS ARE:

(A) COSTS OF EMPLOYEE BENEFITS (AS DEFINED IN IND AS 19, EMPLOYEE BENEFITS) ARISING DIRECTLY FROM THE CONSTRUCTION OR ACQUISITION OF THE ITEM OF PROPERTY, PLANT AND EQUIPMENT;

(B) COSTS OF SITE PREPARATION;

(C) INITIAL DELIVERY AND HANDLING COSTS;

(D) INSTALLATION AND ASSEMBLY COSTS;

(E) COSTS OF TESTING WHETHER THE ASSET IS FUNCTIONING PROPERLY, AFTER DEDUCTING THE NET PROCEEDS FROM SELLING ANY ITEMS PRODUCED WHILE BRINGING THE ASSET TO THAT LOCATION AND CONDITION (SUCH AS SAMPLES PRODUCED WHEN TESTING EQUIPMENT); AND

(F) PROFESSIONAL FEES.

AND…

COSTS THAT ARE NOT COSTS OF AN ITEM OF PROPERTY, PLANT AND EQUIPMENT ARE:

(A) COSTS OF OPENING A NEW FACILITY;

(B) COSTS OF INTRODUCING A NEW PRODUCT OR SERVICE (INCLUDING COSTS OF ADVERTISING AND PROMOTIONAL ACTIVITIES);

(C) COSTS OF CONDUCTING BUSINESS IN A NEW LOCATION OR WITH A NEW CLASS OF CUSTOMER (INCLUDING COSTS OF STAFF TRAINING); AND

(D) ADMINISTRATION AND OTHER GENERAL OVERHEAD COSTS.

COSTS INCURRED IN USING OR REDEPLOYING AN ITEM ARE NOT INCLUDED IN THE CARRYING AMOUNT OF THAT ITEM

(A) COSTS INCURRED WHILE AN ITEM CAPABLE OF OPERATING IN THE MANNER INTENDED BY MANAGEMENT HAS YET TO BE BROUGHT INTO USE OR IS OPERATED AT LESS THAN FULL CAPACITY;

(B) INITIAL OPERATING LOSSES, SUCH AS THOSE INCURRED WHILE DEMAND FOR THE ITEM'S OUTPUT BUILDS UP; AND

(C) COSTS OF RELOCATING OR REORGANISING PART OR ALL OF AN ENTITY'S OPERATIONS.

AND…

- NOT NECESSARY TO BRING THE ITEM TO THE LOCATION AND CONDITION NECESSARY FOR IT TO BE CAPABLE OF OPERATING IN THE MANNER
- INDAS 2
- IND AS 23, BORROWING COSTS, ESTABLISHES CRITERIA FOR THE RECOGNITION OF INTEREST AS A COMPONENT OF THE CARRYING AMOUNT OF A SELFCONSTRUCTED ITEM OF PROPERTY, PLANT AND EQUIPMENT.
- SELF-CONSTRUCTED ITEMS

MEASUREMENT OF COST

- COST = CASH PRICE EQUIVALENT AT THE RECOGNITION DATE
- INDAS 23
- ACQUIRED IN EXCHANGE FOR A NON-MONETARY ASSET OR ASSETS, OR A COMBINATION OF MONETARY AND NONMONETARY ASSETS.

MEASUREMENT AFTER RECOGNITION

AN ENTITY SHALL CHOOSE EITHER THE **COST MODEL** IN PARAGRAPH 30 OR THE **REVALUATION MODEL** IN PARAGRAPH 31 AS ITS ACCOUNTING POLICY AND SHALL APPLY THAT POLICY TO AN ENTIRE CLASS OF PROPERTY, PLANT AND EQUIPMENT.

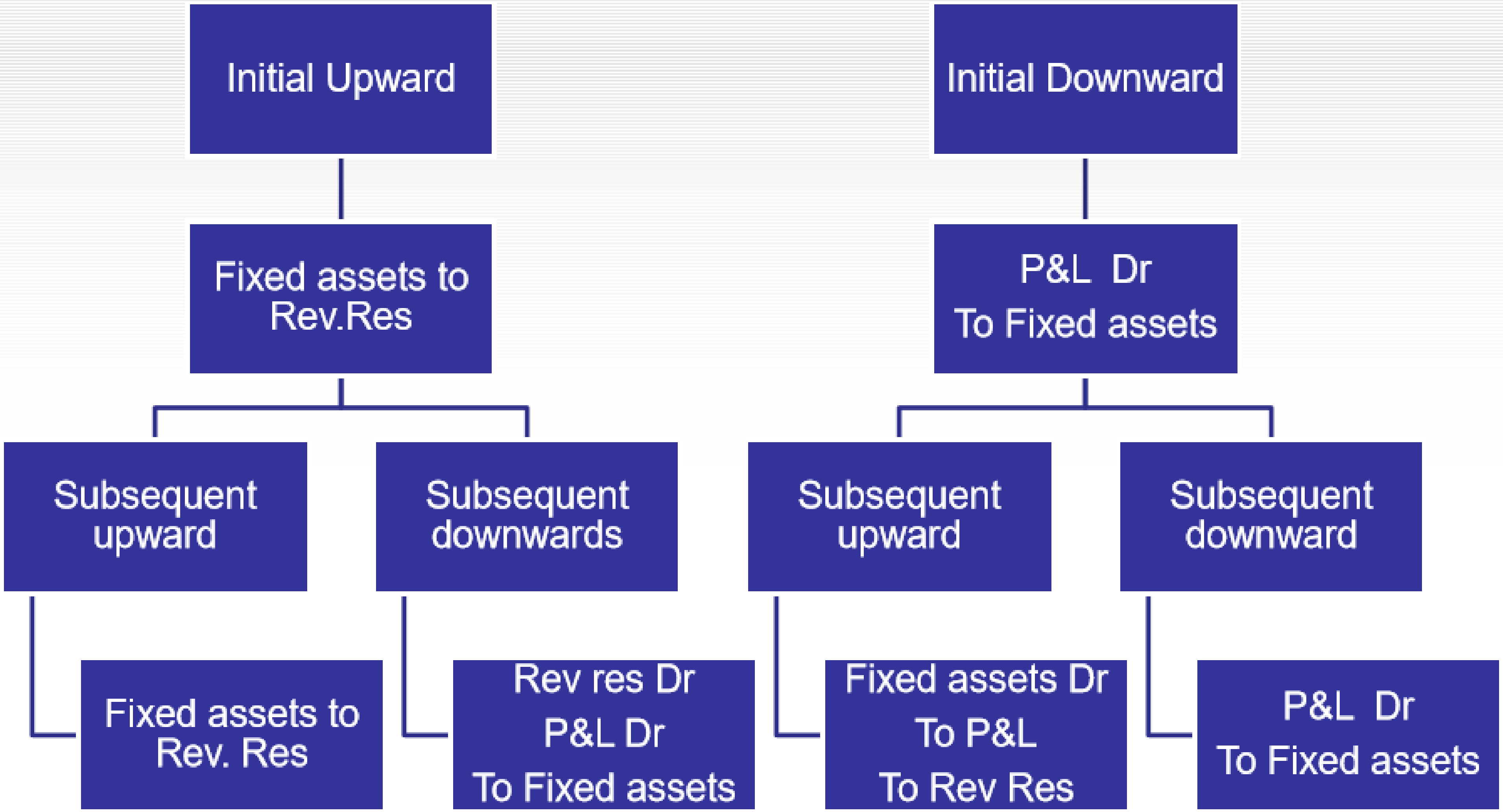
COST MODEL:

AFTER RECOGNITION AS AN ASSET, AN ITEM OF PROPERTY, PLANT AND EQUIPMENT SHALL BE CARRIED AT ITS COST LESS ANY ACCUMULATED DEPRECIATION AND ANY ACCUMULATED IMPAIRMENT LOSSES.

REVALUATION MODEL

- MEANING
- WHEN
- TREATMENT
- CLASS OF ASSET
- SEPARATE CLASS OF ASSET
- HOW TO ACCOUNT
- ACCOUNTING FOR REVALUATION SURPLUS INCLUDED IN EQUITY (CLAUSE #41)
- IND AS 12, INCOME TAXES.

Revaluation



DEPRECIATION

IMPAIRMENT

(INDAS 36)

COMPENSATION FOR IMPAIRMENT

COMPENSATION FROM THIRD PARTIES FOR ITEMS OF PROPERTY, PLANT AND EQUIPMENT THAT WERE IMPAIRED, LOST OR GIVEN UP SHALL BE INCLUDED IN PROFIT OR LOSS WHEN THE COMPENSATION BECOMES RECEIVABLE.

IMPAIRMENTS OR LOSSES OF ITEMS OF PROPERTY, PLANT AND EQUIPMENT, RELATED CLAIMS FOR OR PAYMENTS OF COMPENSATION FROM THIRD PARTIES AND ANY SUBSEQUENT PURCHASE OR CONSTRUCTION OF REPLACEMENT ASSETS ARE SEPARATE ECONOMIC EVENTS AND ARE ACCOUNTED FOR SEPARATELY AS FOLLOWS:

(A) IMPAIRMENTS OF ITEMS OF PROPERTY, PLANT AND EQUIPMENT ARE RECOGNISED IN ACCORDANCE WITH IND AS 36;

(B) DERECOGNITION OF ITEMS OF PROPERTY, PLANT AND EQUIPMENT RETIRED OR DISPOSED OF IS DETERMINED IN ACCORDANCE WITH THIS STANDARD;

(C) COMPENSATION FROM THIRD PARTIES FOR ITEMS OF PROPERTY, PLANT AND EQUIPMENT THAT WERE IMPAIRED, LOST OR GIVEN UP IS INCLUDED IN DETERMINING PROFIT OR LOSS WHEN IT BECOMES RECEIVABLE; AND

(D) THE COST OF ITEMS OF PROPERTY, PLANT AND EQUIPMENT RESTORED, PURCHASED OR CONSTRUCTED AS REPLACEMENTS IS DETERMINED IN ACCORDANCE WITH THIS STANDARD.

DERECOGNITION

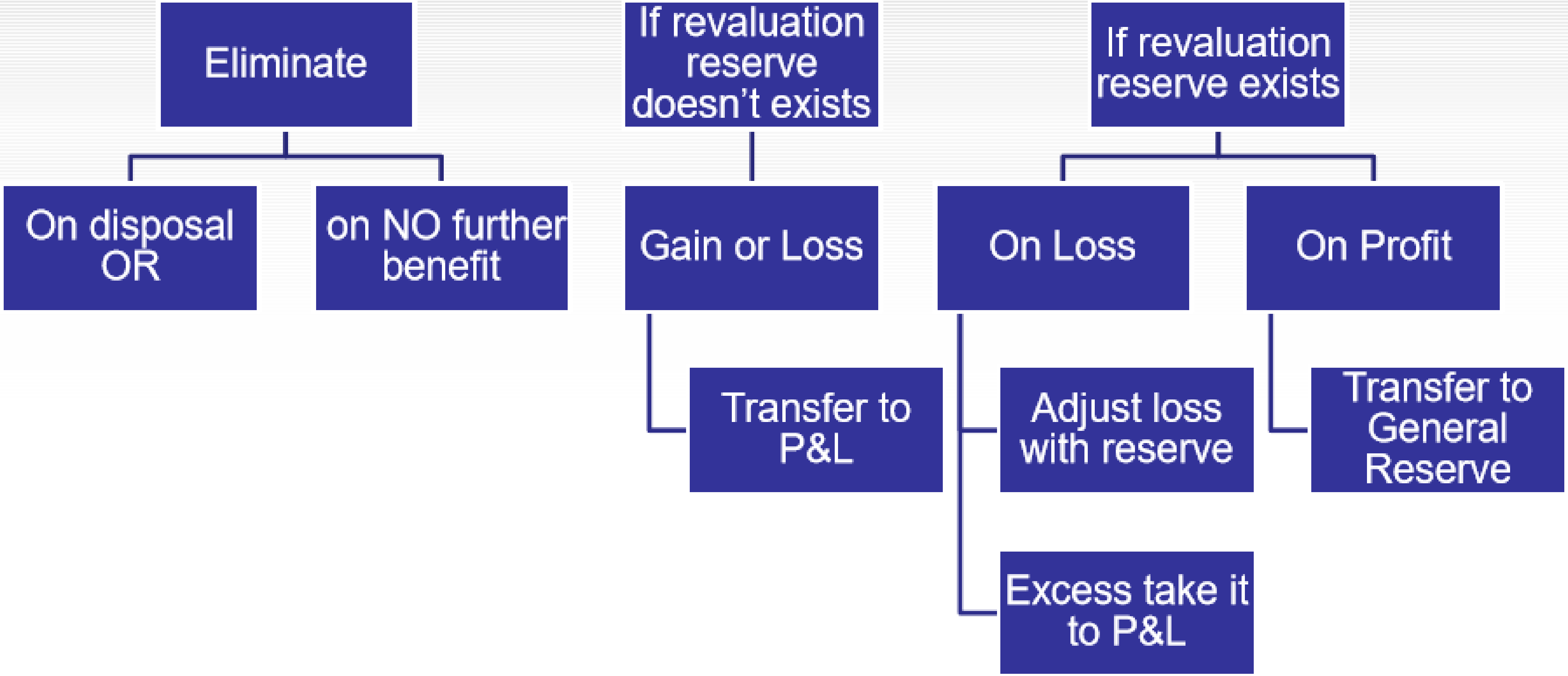
THE CARRYING AMOUNT OF AN ITEM OF PROPERTY, PLANT AND EQUIPMENT SHALL BE DERECOGNISED:

(A) ON DISPOSAL; OR

(B) WHEN NO FUTURE ECONOMIC BENEFITS ARE EXPECTED FROM ITS USE OR DISPOSAL.

THE GAIN OR LOSS ARISING FROM THE DERECOGNITION OF AN ITEM OF PROPERTY, PLANT AND EQUIPMENT SHALL BE INCLUDED IN PROFIT OR LOSS WHEN THE ITEM IS DERECOGNISED (UNLESS IND AS 17 REQUIRES OTHERWISE ON A SALE AND LEASEBACK). GAINS SHALL NOT BE CLASSIFIED AS REVENUE.

Disposal


Eliminate
On disposal OR
on NO further benefit
If revaluation reserve doesn't exists
Gain or Loss
Transfer to P&L
If revaluation reserve exists
On Loss
Adjust loss with reserve
Excess take it to P&L
On Profit
Transfer to General Reserve

- Capitalizing conditions
  - future economic benefits
  - Reliable measurement of cost
  - Doesn't prescribe units of measurement
- **Measurement at recognition**
  - Initial Costs
    - Purchase price
    - Cost to bring into condition
  - Repairs and maint to be expensed
  - Replacement to be capitalised
  - Self constructed assets
    - Material,labour,OH
  - Defferred credit beyond normal- Segregate
- Measurement after recognition
  - Cost Model
  - Revaluation model
  - No Adhoc Revlaluation
- Depreciation
  - Part accounting- Separate depreciation
  - Depreciable amount allocated systematically
  - Should reflect pattern of FEB
  - Separate land and building
  - Systematic Review of residual value and life
- Retirement and Derecognition
  - On disposal or no FEB
  - Lower of CA and NRV after active use

DISCLOSURE

- THE MEASUREMENT BASES USED FOR DETERMINING THE GROSS CARRYING AMOUNT;
- THE DEPRECIATION METHODS USED;
- THE USEFUL LIVES OR THE DEPRECIATION RATES USED;
- THE GROSS CARRYING AMOUNT AND THE ACCUMULATED DEPRECIATION AT THE BEGINNING AND END OF THE PERIOD; AND

A RECONCILIATION OF THE CARRYING AMOUNT AT THE BEGINNING AND END OF THE PERIOD SHOWING:

(I) ADDITIONS;

(II) ASSETS CLASSIFIED AS HELD FOR SALE OR INCLUDED IN A DISPOSAL GROUP CLASSIFIED AS HELD FOR SALE IN ACCORDANCE WITH IND AS 105 AND OTHER DISPOSALS;

(III) ACQUISITIONS THROUGH BUSINESS COMBINATIONS;

(IV) INCREASES OR DECREASES RESULTING FROM REVALUATIONS UNDER PARAGRAPHS 31, 39 AND 40 AND FROM IMPAIRMENT LOSSES RECOGNISED OR REVERSED IN OTHER COMPREHENSIVE INCOME IN ACCORDANCE WITH IND AS 36;

(V) IMPAIRMENT LOSSES RECOGNISED IN PROFIT OR LOSS IN ACCORDANCE WITH IND AS 36;

(VI) IMPAIRMENT LOSSES REVERSED IN PROFIT OR LOSS IN ACCORDANCE WITH IND AS 36;

(VII) DEPRECIATION;

(VIII) THE NET EXCHANGE DIFFERENCES ARISING ON THE TRANSLATION OF THE FINANCIAL STATEMENTS FROM THE FUNCTIONAL CURRENCY INTO A DIFFERENT PRESENTATION CURRENCY, INCLUDING THE TRANSLATION OF A FOREIGN OPERATION INTO THE PRESENTATION CURRENCY OF THE REPORTING ENTITY; AND

(IX) OTHER CHANGES.

THE FINANCIAL STATEMENTS SHALL ALSO DISCLOSE:

(A) THE EXISTENCE AND AMOUNTS OF RESTRICTIONS ON TITLE, AND PROPERTY, PLANT AND EQUIPMENT PLEDGED AS SECURITY FOR LIABILITIES;

(B) THE AMOUNT OF EXPENDITURES RECOGNISED IN THE CARRYING AMOUNT OF AN ITEM OF PROPERTY, PLANT AND EQUIPMENT IN THE COURSE OF ITS CONSTRUCTION;

(C) THE AMOUNT OF CONTRACTUAL COMMITMENTS FOR THE ACQUISITION OF PROPERTY, PLANT AND EQUIPMENT; AND

(D) IF IT IS NOT DISCLOSED SEPARATELY IN THE STATEMENT OF PROFIT AND LOSS, THE AMOUNT OF COMPENSATION FROM THIRD PARTIES FOR ITEMS OF PROPERTY, PLANT AND EQUIPMENT THAT WERE IMPAIRED, LOST OR GIVEN UP THAT IS INCLUDED IN PROFIT OR LOSS.

ILLUSTRATION

ENTITY A, A SUPERMARKET CHAIN, IS RENOVATING ONE OF ITS MAJOR STORES. THE STORE WILL HAVE MORE AVAILABLE SPACE FOR IN STORE PROMOTION OUTLETS AFTER THE RENOVATION AND WILL INCLUDE A RESTAURANT. MANAGEMENT IS PREPARING THE BUDGETS FOR THE YEAR AFTER THE STORE REOPENS, WHICH INCLUDE THE COST OF REMODELLING AND THE EXPECTATION OF A 15% INCREASE IN SALES RESULTING FROM THE STORE RENOVATIONS, WHICH WILL ATTRACT NEW CUSTOMERS. STATE WHETHER THE REMODELING COST WILL BE CAPITALIZED OR NOT.

= THE EXPENDITURE IN REMODELLING THE STORE WILL CREATE FUTURE ECONOMIC BENEFITS (IN THE FORM OF 15% OF INCREASE IN SALES) AND THE COST OF REMODELLING CAN BE MEASURED RELIABLY, THEREFORE, IT SHOULD BE CAPITALISED.

ILLUSTRATION

AN AMUSEMENT PARK HAS A 'SOFT' OPENING TO THE PUBLIC, TO TRIAL RUN ITS ATTRACTIONS. TICKETS ARE SOLD AT A 50% DISCOUNT DURING THIS PERIOD AND THE OPERATING CAPACITY IS 80%. THE OFFICIAL OPENING DAY OF THE AMUSEMENT PARK IS THREE MONTHS LATER. MANAGEMENT CLAIM THAT THE SOFT OPENING IS A TRIAL RUN NECESSARY FOR THE AMUSEMENT PARK TO BE IN THE CONDITION CAPABLE OF OPERATING IN THE INTENDED MANNER. ACCORDINGLY, THE NET OPERATING COSTS INCURRED SHOULD BE CAPITALISED. COMMENT.

=THERE IS SUFFICIENT EVIDENCE THAT THE AMUSEMENT PARK IS CAPABLE OF OPERATING IN THE MANNER INTENDED BY MANAGEMENT. THEREFORE, THESE COSTS ARE SPECIFIC TO THE START-UP AND, THEREFORE, SHOULD BE EXPENSED AS INCURRED.

ILLUSTRATION

ENTITY A EXCHANGES CAR X WITH A BOOK VALUE OF RS 13,00,000 AND A FAIR VALUE OF RS 13,25,000 FOR CASH OF RS 15,000 AND CAR Y WHICH HAS A FAIR VALUE OF RS 13,10,000. THE TRANSACTION LACKS COMMERCIAL SUBSTANCE AS THE COMPANY'S CASH FLOWS ARE NOT EXPECTED TO CHANGE AS A RESULT OF THE EXCHANGE. IT IS IN THE SAME POSITION AS IT WAS BEFORE THE TRANSACTION. WHAT WILL BE THE MEASUREMENT COST OF THE ASSETS RECEIVED?

=THE ENTITY RECOGNISES THE ASSETS RECEIVED AT THE BOOK VALUE OF CAR X. THEREFORE, IT RECOGNISES CASH OF ` 15,000 AND CAR Y AS PPE WITH A CARRYING VALUE OF ` 12,85,000

ILLUSTRATION

ENTITY A IS A LARGE MANUFACTURING GROUP. IT OWNS A NUMBER OF INDUSTRIAL BUILDINGS, SUCH AS FACTORIES AND WAREHOUSES AND OFFICE BUILDINGS IN SEVERAL CAPITAL CITIES. THE INDUSTRIAL BUILDINGS ARE LOCATED IN INDUSTRIAL ZONES, WHEREAS THE OFFICE BUILDINGS ARE IN CENTRAL BUSINESS DISTRICTS OF THE CITIES. ENTITY A'S MANAGEMENT WANT TO APPLY THE REVALUATION MODEL AS PER AS 10 TO THE SUBSEQUENT MEASUREMENT OF THE OFFICE BUILDINGS BUT CONTINUE TO APPLY THE HISTORICAL COST MODEL TO THE INDUSTRIAL BUILDINGS. STATE WHETHER THIS IS ACCEPTABLE UNDER INDAS 16 OR NOT WITH REASONS?

THE OFFICE BUILDINGS CAN BE CLEARLY DISTINGUISHED FROM THE INDUSTRIAL BUILDINGS IN TERMS OF THEIR FUNCTION, THEIR NATURE AND THEIR GENERAL LOCATION. INDAS 16 PERMITS ASSETS TO BE REVALUED ON A CLASS BY CLASS BASIS.

VALUE LTD. ACQUIRED A PLANT ON 1.4.2004 FOR RS 100 LAKHS. THE COMPANY CHARGES STRAIGHT LINE DEPRECIATION ON THE BASIS OF ESTIMATED USEFUL LIFE OF THE ASSET AS 10 YEARS AND SCRAP VALUE AT THE END AS 2.5% OF THE COST. AT THE BEGINNING OF THE 5TH YEAR, THE ASSET WAS REVALUED UPWARD BY 40% OF THE WRITTEN DOWN VALUE AND THE REVALUATION PROFIT WAS TRANSFERRED TO REVALUATION RESERVE. WHILE CHARGING DEPRECIATION AFTER REVALUATION, ESTIMATED REMAINING USEFUL LIFE WAS ASSUMED TO BE 6 YEARS AND SCRAP REALISATION WAS EXPECTED TO BE 2.5% OF THE REVALUED FIGURE. NO ADDITIONAL DEPRECIATION WAS ADJUSTED THROUGH REVALUATION RESERVE ACCOUNT. AT THE BEGINNING OF THE 8TH YEAR THE COMPANY FOUND THE ASSET USELESS AND ACCORDINGLY, DECIDED TO RETIRE IT. ON THE DATE OF RETIREMENT THE ESTIMATED REALISABLE VALUE OF THE ASSET IS RS 3,80,000. ASCERTAIN THE LOSS ON RETIREMENT OF THE ASSET TO BE CHARGED TO STATEMENT OF PROFIT AND LOSS

A

Solution

Original cost	1,00,00,000
SLM depreciation up to 4th year	
(100 – 2.5)/10*4	39,00,000
WDV at end of 4^{th} year	61,00,000
Add: Revaluation profit	
(credited to Revaluation Reserve)	24,40,000
	85,40,000
Revised residual value	
(2.5% of 85,40,000) = ` 2,13,500	
Less:	
Depreciation for 5th, 6th and 7th years	
(8540 – 213.5)/6*3	41,63,250
WDV at end of 7^{th} year	43,76,750
NRV	3,80,000
Loss	39,96,750
Revaluation reserve	24,40,000
Net loss charges to P&L	15,56,750

On 1 April 20X1, Sun ltd purchased some land for Rs 10 million (including legal costs of Rs 1 million) in order to construct a new factory. Construction work commenced on 1 May 20X1. Sun ltd incurred the following costs in relation with its construction:

- Preparation and levelling of the land – Rs 3,00,000.
- Purchase of materials for the construction – Rs 6·08 million in total.
- Employment costs of the construction workers – Rs 2,00,000 per month.
- Overhead costs incurred directly on the construction of the factory – Rs 1,00,000 per month.
- Ongoing overhead costs allocated to the construction project using the company's normal overhead allocation model – Rs 50,000 per month.
- Income received during the temporary use of the factory premises as a car park during the construction period – Rs 50,000.
- Costs of relocating employees to work at the new factory – Rs 300,000.
- Costs of the opening ceremony on 31 January 20X1 – Rs 150,000.
- The factory was completed on 30 November 20X1 and production began on 1 February 20X2. The overall useful life of the factory building was estimated at 40 years from the date of completion. However, it is estimated that the roof will need to be replaced 20 years after the date of completion and that the cost of replacing the roof at current prices would be 30% of the total cost of the building.
- At the end of the 40-year period, Sun ltd has a legally enforceable obligation to demolish the factory and restore the site to its original condition. The directors estimate that the cost of demolition in 40 years' time (based on prices prevailing at that time) will be Rs 20 million. An annual risk adjusted discount rate which is appropriate to this project is 8%. The present value of Rs 1 payable in 40 years' time at an annual discount rate of 8% is 4·6 cents.
- The construction of the factory was partly financed by a loan of Rs 17·5 million taken out on 1 April 20X1. The loan was at an annual rate of interest of 6%. During the period 1 April 20X1 to 31 August 20X1 (when the loan proceeds had been fully utilised to finance the construction), Sun Ltd received investment income of Rs 100,000 on the temporary investment of the proceeds.
- Required:
- Compute the carrying amount of the factory in the Balance Sheet of Sun Ltd at 31 March 20X2. You should explain your treatment of all the amounts referred to in this part in your answer

Description	Rs 000		
Purchase of land	10,000		
Preparation and levelling	300		
Materials	6,080		
Employment costs of construction workers	1,400		
Direct overhead costs	700		
Allocated General overhead costs	Nil		
Income from use as a car park	Nil		
Relocation costs	Nil		
Opening ceremony	Nil		
Finance costs(for 8 months)	700		
Investment income	(100)		
Demolition cost recognised as a provision	920		20,000
Accumulated depreciation			
Total depreciable amount 10,000			
Depreciation of roof component 10,000 x 30% x 1/20 x 4/12		50	
Depreciation of remainder 10,000 x 70% x 1/40 x 4/12		58	108
Computation of carrying amount			19892

THANK YOU…

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