

FINAL
Paper 18

Corporate Financial Reporting

Study Notes
SYLLABUS 2022



The Institute of Cost Accountants of India

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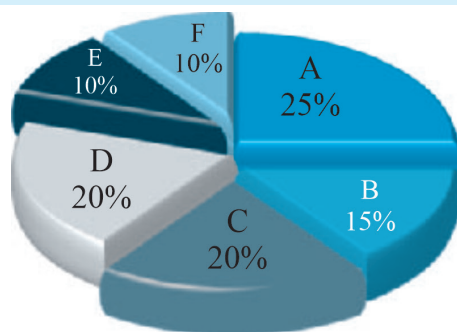
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PAPER 18 : CORPORATE FINANCIAL REPORTING

Syllabus Structure:

The syllabus in this paper comprises the following topics and study weightage:

Module No.	Module Description	Weight
Section A: Indian Accounting Standards		25%
1	Specific Accounting Standards	25%
Section B: Valuation of Shares, Accounting and Reporting of Financial Instruments and NBFCs		15%
2	Valuation of Shares (Including Determination of Goodwill, Post-Valuation of Tangible and Intangible Assets)	15%
3	Accounting of Financial Instruments	
4	NBFCs – Provisioning Norms, Accounting and Reporting	
Section C: Accounting for Business Combination and Restructuring (in Compliance with Ind ASs)		20%
5	Accounting for Business Combinations and Restructuring	20%
Section D: Consolidated Financial Statements and Separate Financial Statements (in Compliance with Ind ASs)		20%
6	Consolidated Financial Statements and Separate Financial Statements	20%
Section E: Recent Developments in Financial Reporting		10%
7	Recent Developments in Financial Reporting	10%
Section F: Government Accounting in India		10%
8	Government Accounting in India	10%



Learning Environment – Paper 18

Subject Title	CORPORATE FINANCIAL REPORTING
Subject Code	CFR
Paper No.	18
Course Description	The subject Corporate Financial Reporting focuses (i) primarily on corporate financial accounting and reporting based on Ind AS, (ii) on recent developments in financial reporting beyond Ind AS, and (iii) on government accounting. In primary focus, selected Ind ASs are included to transfer in-depth knowledge in a precise manner on the entire field of corporate accounting and reporting with special emphasis on accounting and reporting of groups.
CMA Course Learning Objectives (CMLOs)	<ol style="list-style-type: none"> 1. Interpret and appreciate emerging national and global concerns affecting organizations and be in a state of readiness for business management. <ol style="list-style-type: none"> a. Identify emerging national and global forces responsible for enhanced/varied business challenges. b. Assess how far these forces pose threats to the status-quo and creating new opportunities. c. Find out ways and means to convert challenges into opportunities 2. Acquire skill sets for critical thinking, analyses and evaluations, comprehension, syntheses, and applications for optimization of sustainable goals. <ol style="list-style-type: none"> a. Be equipped with the appropriate tools for analyses of business risks and hurdles. b. Learn to apply tools and systems for evaluation of decision alternatives with a 360-degree approach. c. Develop solutions through critical thinking to optimize sustainable goals. 3. Develop an understanding of strategic, financial, cost and risk-enabled performance management in a dynamic business environment. <ol style="list-style-type: none"> a. Study the impacts of dynamic business environment on existing business strategies. b. Learn to adopt, adapt and innovate financial, cost and operating strategies to cope up with the dynamic business environment. c. Come up with strategies and tactics that create sustainable competitive advantages. 4. Learn to design the optimal approach for management of legal, institutional, regulatory and ESG frameworks, stakeholders' dynamics; monitoring, control, and reporting with application-oriented knowledge. <ol style="list-style-type: none"> a. Develop an understanding of the legal, institutional and regulatory and ESG frameworks within which a firm operates. b. Learn to articulate optimal responses to the changes in the above frameworks. c. Appreciate stakeholders' dynamics and expectations, and develop appropriate reporting mechanisms to address their concerns. 5. Prepare to adopt an integrated cross functional approach for decision management and execution with cost leadership, optimized value creations and deliveries. <ol style="list-style-type: none"> a. Acquire knowledge of cross functional tools for decision management. b. Take an industry specific approach towards cost optimization, and control to achieve sustainable cost leadership. c. Attain exclusive knowledge of data science and engineering to analyze and create value.

Subject Learning Objectives [SLOB(s)]	<ol style="list-style-type: none"> 1. To obtain in-depth knowledge on accounting and reporting of financial information for different types of corporate entities engaged in activities across certain sectors based on specified Ind ASs. (CMLO 1 a, c; 4 a, b) 2. To acquire in-depth knowledge on accounting and reporting of different modes of business combinations including other complications associated in Ind AS environment. (CMLO 1 a, c; 4 a, c) 3. To develop detail understanding on preparation of consolidated and separate financial statements by companies having significant influence on, joint control or control of other entities in an Ind AS environment. (CMLO 1 a, c; 4 a, c) 4. To expose students to the contemporary research and developments on corporate financial reporting from the viewpoint of all the stakeholders in global context beyond the boundary of Ind AS. (CMLO 1 a, b, c; 2 b, c; 4 c) 5. To equip students with in-depth knowledge on the traditional and modern approaches to valuation of business, goodwill and shares based on corporate financial reporting. (CMLO 5 c) 6. To expose students to the financial reporting of NBFCs, to government accounting, and to XBRL. (CMLO 4 a, c)
Subject Learning Outcome [SLOC(s)] and Application Skill [APS]	<p>SLOC(s):</p> <ol style="list-style-type: none"> 1. Students will be able to perform accounting and reporting of financial events of corporate entities including NBFCs based on Ind AS and to decide on the judgemental issues associated. 2. Students will be able to perform accounting and reporting of different modes of business combinations of corporate entities based on Ind AS and to decide on the associated judgemental issues. 3. Students will be able to prepare consolidated and separate financial statements based on Ind AS and to decide on issues associated with decision management. 4. Students will get reasonable exposure to the recent developments on financial reporting in a wider perspective from the holistic point of view whether or not captured in regulatory framework. 5. Students will get in-depth knowledge on valuation principles and practice, relevant for corporate financial decision. 6. Students will get exposures to government accounting and reporting through XBRL. <p>APS:</p> <ol style="list-style-type: none"> 1. Students will develop skills to independently prepare necessary accounts and draft mandatory financial statements of various companies including NBFCs as per the provisions of Companies Act and applicable Ind ASs. 2. Students will acquire skills to independently prepare necessary accounts and draft mandatory financial statements for different cases of business combinations. 3. Students will develop skills to independently prepare necessary accounts and draft mandatory consolidated financial statements for the group and separate financial statements for the investor company. 4. Students will attain capabilities to independently value business, intangible assets (goodwill, in particular) and shares. 5. Students will be able to maintain statutory books under government accounting and prepare documents for XBRL filing.

Module wise Mapping of SLOB(s)			
Module No.	Topics	Additional Resources (Research articles, books, case studies, blogs)	SLOB Mapped
Section A: Indian Accounting Standards			
1	Indian Accounting Standards	Indian Accounting Standards (Texts): https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html#:~:text=The%20Indian%20Accounting%20Standards%20(Ind,held%20by%20the%20IFRS%20Foundation.	To obtain in-depth knowledge on accounting and reporting of financial information for different types of corporate entities engaged in activities across certain sectors based on specified Ind ASs.
Section B: Valuation of Shares, Accounting and Reporting of Financial Instruments and NBFCs			
2	Valuation of Shares	Some “Conceptualizing” on Goodwill – Gynther https://www.jstor.org/stable/243799	To equip students with in-depth knowledge on the traditional and modern approaches to valuation of business, goodwill and shares based on corporate financial reporting.
3	Accounting of Financial Instruments	Indian Accounting Standards (Texts) on Financial Instruments: https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html	To obtain in-depth knowledge on accounting and reporting of financial information for different types of corporate entities engaged in activities across certain sectors based on specified Ind ASs.
4	NBFCs – Provisioning Norms, Accounting and Reporting	NBFC Prudential Norms by RBI: https://rbi.org.in/Scripts/BS_NBFCNotificationView.aspx?Id=1007	To expose students to the financial reporting of NBFCs, to government accounting, and to XBRL.
Section C: Accounting for Business Combination and Restructuring (in Compliance with Ind ASs)			
5	Accounting for Business Combination and Restructuring	Indian Accounting Standards (Texts) on Business Combination: https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html	To acquire in-depth knowledge on accounting and reporting of different modes of business combinations including other complications associated in Ind AS environment.

Module wise Mapping of SLOB(s)			
Module No.	Topics	Additional Resources (Research articles, books, case studies, blogs)	SLOB Mapped
Section D: Consolidated Financial Statements and Separate Financial Statements (in Compliance with Ind ASs)			
6	Consolidated Financial Statements and Separate Financial Statements	Indian Accounting Standards (Texts) on Consolidation: https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html	To develop detail understanding on preparation of consolidated and separate financial statements by companies having significant influence on, joint control or control of other entities in an Ind AS environment.
Section E: Recent Developments in Financial Reporting			
7	Recent Developments in Financial Reporting	Integrated Reporting Framework: https://www.integratedreporting.org/ The global standards for sustainability reporting https://www.globalreporting.org/standards/	To expose students to the contemporary research and developments on corporate financial reporting from the viewpoint of all the stakeholders in global context beyond the boundary of Ind AS.
Section F: Government Accounting in India			
8	Government Accounting in India	Indian Government Accounting Standards: https://dea.gov.in/budgetdivision/indian-government-accounting-standards	To expose students to the financial reporting of NBFCs, to government accounting, and to XBRL.

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1.5 The Effects of Changes in Foreign Exchange Rates (Ind AS 21)	
1.6 Borrowing Costs (Ind AS 23)	
1.7 Impairment of Assets (Ind AS 36)	
1.8 Intangible Assets (Ind AS 38)	
1.9 Share based Payment (Ind AS 102)	
1.10 Operating Segments (Ind AS 108)	
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- 6.6 Consolidated Financial Statements and Separate Financial Statements at Subsequent Reporting Date - Introductory Examples.
- 6.7 Consolidated and Separate Financial Statements of Group Entities - Advanced Level Discussion and Examples (including Inter-company Investments, Chain Holding, Crossholding and Other Relevant Matters)
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Section-A

Indian Accounting Standards

Specific Accounting Standards

1

This Module Includes

- 1.1 Accounting Policies, Changes in Accounting Estimates and Errors (Ind AS 8)**
- 1.2 Income Taxes (Ind AS 12)**
- 1.3 Property, Plant and Equipment (Ind AS 16)**
- 1.4 Leases (Ind AS 116)**
- 1.5 The Effects of Changes in Foreign Exchange Rates (Ind AS 21)**
- 1.6 Borrowing Costs (Ind AS 23)**
- 1.7 Impairment of Assets (Ind AS 36)**
- 1.8 Intangible Assets (Ind AS 38)**
- 1.9 Share based Payment (Ind AS 102)**
- 1.10 Operating Segments (Ind AS 108)**
- 1.11 Fair Value Measurement (Ind AS 113)**
- 1.12 Revenue from Contracts with Customers (Ind AS 115)**

Specific Accounting Standards

SLOB Mapped against the Module

To obtain in-depth knowledge on accounting and reporting of financial information for different types of corporate entities engaged in activities across certain sectors based on specified Ind ASs.

Module Learning Objectives

- ⦿ A cost and management accountant (CMA) should obviously be strong in cost accounting and in management accounting, but at the same time a CMA should no less be strong in financial accounting. Corporate financial accounting is mandatorily done in compliance with Indian Accounting Standards for listed and other specified companies and with Accounting Standards for the residual huge mass of corporate entities in India.
- ⦿ This module takes up selected Indian Accounting Standards not only with the purpose of equipping the students with in-depth knowledge about the guidelines provided in the standards but also to make them well conversant with their use in practical accounting application. The expected outcome of this module is to make students able to reflect the standards in journal, balance sheet, Statement of Profit and Loss, notes and in statement of cash flows.

Introduction

1

The Indian Accounting Standards (Ind ASs) are the standards prepared by the Accounting Standard Board (ASB) of the Institute of the Chartered Accountants of India (ICAI) in convergence with International Financial Reporting Standards (IFRSs) [where IFRS includes International Accounting Standards (IAS)]. It implies India did not fully adopt IFRS, rather modified it in the way compatible to conditions in India and it is considered as converged IFRS.

The Companies (Indian Accounting Standards) Rules, 2015 (and subsequent amendments to the Rules) made Ind AS applicable to the specified entities, leaving AS [as per the Companies (Accounting Standards) Rules, 2021 (replacing the Companies (Accounting Standards) Rules, 2006)] applicable to other entities.

Ind ASs are mandatorily applicable to specified entities with effect from specified dates. A summary of the applicability of Ind ASs is tabulated below.

Types of Companies/entities	Threshold Limit of Net worth (INR)	Applicable from	Ind AS applicability on 01/04/22
Listed Companies/ Companies in process of Listing in India or outside India or Parent, Subsidiary, Associate, and Joint Venture of above	500 Cr or more	01/04/2016	Applicable
	less than 500 Cr	01/04/2017	Applicable
Unlisted Companies/Pvt. Ltd. Companies	500 Cr or more	01/04/2016	Applicable
	250 Cr or more	01/04/2017	Applicable
	less than 250 Cr		Not Applicable
Companies listed in SME			Not Applicable
NBFC – Listed	500 Cr or more	01/04/2018	Applicable
	Less than 500 Cr	01/04/2019	Applicable
NBFC – Unlisted	500 Cr or more	01/04/2018	Applicable
	250 Cr or more	01/04/2019	Applicable
	Less than 250 Cr		Not Applicable
Banks			Not Applicable (Implementation deferred)

Types of Companies/entities	Threshold Limit of Net worth (INR)	Applicable from	Ind AS applicability on 01/04/22
Insurance co			Not Applicable (Implementation deferred)
Urban Cooperative Bank			Not Applicable
Rural Regional Bank			Not Applicable

As on 01-04-2022 Ministry of Corporate Affairs (MCA) has notified 42 Ind ASs out of which 3 were omitted leaving 39 in application at present.

The full list is presented below:

Ind AS 101	First-time adoption of Ind AS
Ind AS 102	Share Based payments
Ind AS 103	Business Combination
Ind AS 104	Insurance Contracts (to be replaced by Ind AS 117 Insurance Contracts, not yet notified by the MCA)
Ind AS 105	Non-Current Assets Held for Sale and Discontinued Operations
Ind AS 106	Exploration for and Evaluation of Mineral Resources
Ind AS 107	Financial Instruments: Disclosures
Ind AS 108	Operating Segments
Ind AS 109	Financial Instruments
Ind AS 110	Consolidated Financial Statements
Ind AS 111	Joint Arrangements
Ind AS 112	Disclosure of Interests in Other Entities
Ind AS 113	Fair Value Measurement
Ind AS 114	Regulatory Deferral Accounts
Ind AS 115	Revenue from Contracts with Customers (Ind AS 11 and Ind AS 18 replaced)
Ind AS 116	Leases (Ind AS 17 replaced)
Ind AS 1	Presentation of Financial Statements
Ind AS 2	Inventories Accounting
Ind AS 7	Statement of Cash Flows
Ind AS 8	Accounting Policies, Changes in Accounting Estimates and Errors
Ind AS 10	Events after Reporting Period

Ind AS 12	Income Taxes
Ind AS 16	Property, Plant and Equipment
Ind AS 19	Employee Benefits
Ind AS 20	Accounting for Government Grants and Disclosure of Government Assistance
Ind AS 21	The Effects of Changes in Foreign Exchange Rates
Ind AS 23	Borrowing Costs
Ind AS 24	Related Party Disclosures
Ind AS 27	Separate Financial Statements
Ind AS 28	Investments in Associates and Joint Ventures
Ind AS 29	Financial Reporting in Hyperinflationary Economies
Ind AS 32	Financial Instruments: Presentation
Ind AS 33	Earnings per Share
Ind AS 34	Interim Financial Reporting
Ind AS 36	Impairment of Assets
Ind AS 37	Provisions, Contingent Liabilities and Contingent Assets
Ind AS 38	Intangible Assets
Ind AS 40	Investment Property
Ind AS 41	Agriculture

Out of total of 39 standards some were already introduced in the intermediate course, some others, on the basis of their relevance and weightage have been selected in the final course as enumerated below;

In the following section shall discuss the following selected Ind ASs:

1. Accounting Policies, Changes in Accounting Estimates and Errors (Ind AS 8)
2. Income Taxes (Ind AS 12)
3. Property, Plant and Equipment (Ind AS 16)
4. Leases (Ind AS 116)
5. The Effects of Changes in Foreign Exchange Rates (Ind AS 21)
6. Borrowing Costs (Ind AS 23)
7. Impairment of Assets (Ind AS 36)
8. Intangible Assets (Ind AS 38)
9. Share-based Payment (Ind AS 102)
10. Operating Segments (Ind AS 108)
11. Fair Value Measurement (Ind AS 113)
12. Revenue from Contracts with Customers (Ind AS 115)

Accounting Policies, Changes in Accounting Estimates and Errors (Ind AS 8)

1.1

Objective of this Standard is to prescribe the criteria for selecting and changing accounting policies, together with the accounting treatment and disclosure of changes in accounting policies, changes in accounting estimates and corrections of errors. The Standard is intended to enhance the relevance and reliability of an entity's financial statements, and the comparability of those financial statements over time and with the financial statements of other entities. 2 Disclosure requirements for accounting policies, except those for changes in accounting policies, are set out in Ind AS 1 Presentation of Financial Statements.

This Standard shall be applied in

- ⦿ selecting and applying accounting policies, and
- ⦿ accounting for changes in accounting policies,
- ⦿ changes in accounting estimates and
- ⦿ corrections of prior period errors.

Selecting and applying accounting policies

When an Ind AS specifically applies to a transaction, other event or condition, the accounting policy or policies applied to that item shall be determined by applying the Ind AS.

In the absence of an Ind AS that specifically applies to a transaction, other event or condition, management shall use its judgement in developing and applying an accounting policy that results in relevant and reliable information.

Relevant means the information is useful for making economic decisions.

Reliable means the financial statements

- (i) represent faithfully the financial position, financial performance and cash flows of the entity;
- (ii) reflect the economic substance of transactions, other events and conditions, and not merely the legal form;
- (iii) are neutral, ie free from bias;
- (iv) are prudent; and
- (v) are complete in all material respects.

In making the judgement management shall refer to, and consider the applicability of, the following sources in descending order:

- (a) the requirements in Ind ASs dealing with similar and related issues; and
- (b) the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the Framework.
- (c) other sources not in conflict with (a) and (b) in the following order

- (i) most recent pronouncements of International Accounting Standards Board
- (ii) in absence of thereof, those of the other standard setting bodies that use a similar conceptual framework to develop accounting standards,
- (iii) other accounting literature and
- (iv) accepted industry practices

An entity shall select and apply its accounting policies consistently for similar transactions, other events and conditions.

Change in an Accounting Policy

An entity shall change an accounting policy only if the change: (a) is required by an Ind AS; or (b) results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flows. The following are not changes in accounting policies:

- (a) the application of an accounting policy for transactions, other events or conditions that differ in substance from those previously occurring; and
- (b) the application of a new accounting policy for transactions, other events or conditions that did not occur previously or were immaterial.

The initial application of a policy to revalue assets in accordance with Ind AS 16 Property, Plant and Equipment or Ind AS 38 Intangible Assets is a change in an accounting policy to be dealt with as a revaluation in accordance with Ind AS 16 or Ind AS 38, rather than in accordance with this Standard.

When a change in accounting policy is applied retrospectively, the entity shall adjust the opening balance of each affected component of equity for the earliest prior period presented and the other comparative amounts disclosed for each prior period presented as if the new accounting policy had always been applied.

When change of accounting policy is due to initial application of an Ind AS that has an effect on the current period or any prior period, an entity shall disclose:

- (a) the title and nature of the Ind AS,
- (b) description and future effects, if any, of the transitional provisions
- (c) for the current period and each prior period presented, to the extent practicable, the amount of the adjustment:
 - (i) for each financial statement line item affected; and
 - (ii) if Ind AS 33 Earnings per Share applies to the entity, for basic and diluted earnings per share;
- (d) the amount of the adjustment relating to periods before those presented, to the extent practicable. Financial statements of subsequent periods need not repeat these disclosures.

When the change in accounting policy is voluntary (a) and (b) above are replaced by the following:

- (a) the nature of the change in accounting policy;
- (b) the reasons why applying the new accounting policy provides reliable and more relevant information.

Change in an Accounting Estimate

To the extent that a change in an accounting estimate gives rise to changes in assets and liabilities, or relates to an item of equity, it shall be recognised by adjusting the carrying amount of the related asset, liability or equity item in the period of the change.

The effect of other changes in an accounting estimate, shall be recognised prospectively by including it in profit

or loss in: (a) the period of the change, if the change affects that period only; or (b) the period of the change and future periods, if the change affects both.

An entity shall disclose the nature and amount of a change in an accounting estimate that has an effect in the current period or is expected to have an effect in future periods, except for the disclosure of the effect on future periods when it is impracticable to estimate that effect. 40 If the amount of the effect in future periods is not disclosed because estimating it is impracticable, an entity shall disclose that fact.

Correction of Prior Period Errors

An entity shall correct material prior period errors retrospectively in the first set of financial statements approved for issue after their discovery by:

- (a) restating the comparative amounts for the prior period(s) presented in which the error occurred; or
- (b) if the error occurred before the earliest prior period presented, restating the opening balances of assets, liabilities and equity for the earliest prior period presented.

Limitations on retrospective restatement

A prior period error shall be corrected by retrospective restatement except to the extent that it is impracticable to determine either the period-specific effects or the cumulative effect of the error.

When it is impracticable to determine effects of error in certain prior periods, the entity shall restate from the earliest period or from the prospective date it becomes practicable.

An entity shall disclose the following:

- (a) the nature of the prior period error;
- (b) for each prior period presented, to the extent practicable, the amount of the correction:
 - (i) for each financial statement line item affected; and
 - (ii) if Ind AS 33 applies to the entity, for basic and diluted earnings per share;
- (c) the amount of the correction at the beginning of the earliest prior period presented; and
- (d) if retrospective restatement is impracticable for a particular prior period, the circumstances that led to the existence of that condition and a description of how and from when the error has been corrected.

Financial statements of subsequent periods need not repeat these disclosures.

Objective: The objective of this Standard is to prescribe the accounting treatment for income taxes. The principal issue in accounting for income taxes is how to account for the current and future tax consequences of: (a) the future recovery (settlement) of the carrying amount of assets (liabilities) that are recognised in an entity's balance sheet; and (b) transactions and other events of the current period that are recognised in an entity's financial statements. It is inherent in the recognition of an asset or liability that the reporting entity expects to recover or settle the carrying amount of that asset or liability. If it is probable that recovery or settlement of that carrying amount will make future tax payments larger (smaller) than they would be if such recovery or settlement were to have no tax consequences, this Standard requires an entity to recognise a deferred tax liability (deferred tax asset), with certain limited exceptions. This Standard requires an entity to account for the tax consequences of transactions and other events in the same way that it accounts for the transactions and other events themselves. Thus, for transactions and other events recognised in profit or loss, any related tax effects are also recognised in profit or loss. For transactions and other events recognised outside profit or loss (either in other comprehensive income or directly in equity), any related tax effects are also recognised outside profit or loss (either in other comprehensive income or directly in equity, respectively). Similarly, the recognition of deferred tax assets and liabilities in a business combination affects the amount of goodwill arising in that business combination or the amount of the bargain purchase gain recognised. This Standard also deals with the recognition of deferred tax assets arising from unused tax losses or unused tax credits, the presentation of income taxes in the financial statements and the disclosure of information relating to income taxes.

This standard shall be applied in accounting for income taxes.

Accounting for income taxes is made in financial accounting by recognising

- (A) Tax expenses,
- (B) Current and deferred tax liabilities and
- (C) Current and deferred tax assets in the financial statements.

Tax expense includes (I) Current taxes and (II) Deferred taxes (that increases or reduces deferred tax liabilities/assets). Current taxes are based on Taxable profits (Tax loss) determined in accordance with taxation laws, which may be different from accounting profit (before tax).

Current and future tax consequences (payments and savings) arise from two sources:

- (a) future recovery/settlement of carrying amount of assets/liabilities recognised in balance sheet.
- (b) transactions or other events recognised in financial statements (in SOPL, OCI, Other equity, or Goodwill/Gain on bargain purchase in business combination). The carrying amount recognised in balance sheet may differ from the carrying amount determined for tax purpose, which is called Tax base of an asset/liability. The difference is called temporary difference, classified into two groups: (i) Taxable temporary differences having effect on deferred tax expense and deferred tax liabilities and (ii) Deductible temporary differences having effect on deferred tax expense and deferred tax assets.

At this point we may define the terms used so far.

- ⊙ **Accounting Profit** is profit or loss for a period before deducting tax expense.
- ⊙ **Taxable Profit** (tax loss) is the profit (loss) for a period, determined in accordance with the rules established by the taxation authorities, upon which income taxes are payable (recoverable).
- ⊙ **Tax Expense** (tax income) comprises current tax expense (current tax income) and deferred tax expense (deferred tax income).
- ⊙ **Current Tax** is the amount of income taxes payable (recoverable) in respect of the taxable profit (tax loss) for a period.
- ⊙ **Deferred Tax Liabilities** are the amounts of income taxes payable in future periods in respect of taxable temporary differences.
- ⊙ **Deferred Tax Assets** are the amounts of income taxes recoverable in future periods in respect of:
 - (a) deductible temporary differences;
 - (b) the carry forward of unused tax losses; and
 - (c) the carry forward of unused tax credits.

Temporary Differences are differences between the carrying amount of an asset or liability in the balance sheet and its tax base. Temporary differences may be either:

- (a) taxable temporary differences, which are temporary differences that will result in taxable amounts in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled; or
- (b) deductible temporary differences, which are temporary differences that will result in amounts that are deductible in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled.

The tax base of an asset or liability is the amount attributed to that asset or liability for tax purposes.

The tax base of an asset is the amount that will be deductible for tax purposes against any taxable economic benefits that will flow to an entity when it recovers the carrying amount of the asset.

If those economic benefits will not be taxable, the tax base of the asset is equal to its carrying amount.

Most deferred tax liabilities/assets arise where the source income/expense is included in accounting profit in current period and included in taxable profit in later period.

Illustration 1

A company measured accounting profit of ₹ 80,000 after charging depreciation of ₹12,000. On interest receivable income tax is levied on cash basis. Included in accounting profit is Interest accrued ₹ 5,000, which is not included in taxable profit of ₹ 67,000. Tax rate is 30%. For tax purpose depreciation admissible is ₹ 20,000. Carrying amount of fixed assets was ₹ 68,000 and tax base of fixed assets ₹60,000 before charging depreciation for the current year. Find:

- (i) Carrying amount and tax base of the fixed assets and tax base of Interest accrued at the end of the year.
- (ii) Temporary Differences for fixed assets and interest accrued
- (iii) current tax expenses and deferred tax expenses
- (iv) deferred tax liabilities and deferred tax assets, if any.

Solution:**(Amount in ₹)**

Particulars	Carrying amount	Tax base	Taxable Temporary difference	Current tax	Deferred tax	Deferred tax liabilities	Tax Expense
	(i)	(ii)	(ii)	(iii)	(iii)	(iv)	(v)
Fixed Assets (before depreciation)	68,000	60,000					
Less: Depreciation	12,000	20,000					
Balance	56,000	40,000	16,000		4,800	4,800	
Interest Accrued	5,000	0	5,000		1,500	1,500	
Total			1,000		6,300	6,300	
Taxable Profit			67,000	20,100			
Accounting Profit			80,000				24,000

Illustration 2(a)

- (a) A fixed asset is acquired at ₹1,50,000 with life 5 years, no residual value and Depreciation chargeable at SLM for accounting purpose. For tax purpose depreciation is admissible at ₹ 50,000 for first 3 years only. Show tax consequences for all the years.

Solution:**(Amount in ₹)**

Year	0	1	2	3	4	5	6
a. Fixed Asset	1,50,000						
b. Depreciation		25,000	25,000	25,000	25,000	25,000	25,000
c. Carrying amount	a - b	1,25,000	1,00,000	75,000	50,000	25,000	0
d. Depreciation for tax purpose		50,000	50,000	50,000	0	0	0
e. Tax base	a - d	1,00,000	50,000	0	0	0	0
f. Temporary difference	c - e	25,000	50,000	75,000	50,000	25,000	0
g. Deferred tax liabilities recognised in balance sheet @30% on temporary differences		7,500	15,000	22,500	15,000	7,500	0
h. Deferred tax expense recognised in Statement of Profit and Loss (change in liabilities)	g(t+1) - gt	7,500	7,500	7,500	(7,500)	(7,500)	(7,500)

(b) Show the tax expenses for the above case if before depreciation accounting profits are same as before depreciation taxable profits for the years as stated below: (Amount in ₹)

	0	1	2	3	4	5	6
a. Accounting profits before depreciation	1,50,000	1,80,000	2,00,000	1,60,000	1,90,000	2,20,000	2,40,000

Solution:

Year		1	2	3	4	5	6
a. Accounting profits before depreciation		1,80,000	2,00,000	1,60,000	1,90,000	2,20,000	2,40,000
b. Depreciation		25,000	25,000	25,000	25,000	25,000	25,000
c. Accounting profits	a - b	1,55,000	1,75,000	1,35,000	1,65,000	1,95,000	2,15,000
d. Depreciation for tax purpose		50,000	50,000	50,000	0	0	0
e. Taxable profits	a - d	1,30,000	1,50,000	1,10,000	1,90,000	2,20,000	2,40,000
f. Current tax expenses 30%*e	c - e	39,000	45,000	33,000	57,000	66,000	72,000
g. Deferred tax expense recognised in SOPL	Ah	7,500	7,500	7,500	(7,500)	(7,500)	(7,500)
h. Tax expenses	f + g	46,500	52,500	40,500	49,500	58,500	64,500

Illustration 3

A company creates provision for Gratuity and Leave encashment and recognises liability of ₹50,000. This is the only difference between taxable profits and accounting profits. The company measures current tax of ₹ 48,000 at tax rate of 25%. Compute Tan Expenses.

Solution:

Particulars	(₹)
(i) Carrying amount of Liabilities for Gratuity and Leave encashment	50,000
(ii) Tax base (since provision is not admissible for tax purpose)	0
(iii) Temporary difference (i) - (ii)	50,000
(iv) Deferred tax asset 25% × c	12,500
(v) Deferred tax expenses (change in deferred tax asset)	(12,500)
(vi) Current tax expenses (given)	48,000
(vii) Tax expenses (v) + (vi)	35,500

If carrying amount is recoverable and it is greater than tax base, tax is payable in future and there arise deferred tax liability.

If carrying amount is recoverable and it is less than tax base, for loss tax is deductible in future and there arise deferred tax asset.

If carrying amount is payable and it is greater than tax base, tax is deductible in future and there arise deferred tax asset.

Disclosure:

The major components of tax expense (income) shall be disclosed separately. Components of tax expense (income) may include:

- (a) current tax expense (income);
- (b) any adjustments recognised in the period for current tax of prior periods;
- (c) the amount of deferred tax expense (income) relating to the origination and reversal of temporary differences;
- (d) the amount of deferred tax expense (income) relating to changes in tax rates or the imposition of new taxes;

The following shall also be disclosed separately:

- (a) the aggregate current and deferred tax relating to items that are charged or credited directly to equity
- (b) the amount of income tax relating to each component of other comprehensive income.

Property, Plant and Equipment (Ind AS 16)

1.3

Objective of this Standard is to prescribe the accounting treatment for property, plant and equipment so that users of the financial statements can discern information about an entity's investment in its property, plant and equipment and the changes in such investment. The principal issues in accounting for property, plant and equipment are the recognition of the assets, the determination of their carrying amounts and the depreciation charges and impairment losses to be recognised in relation to them.

1. (a) The cost of an item of property, plant and equipment shall be recognised as an asset if, and only if: (i) it is probable that future economic benefits associated with the item will flow to the entity; and (ii) the cost of the item can be measured reliably.
 - (b) Property Plant and Equipment are initially recognized at cost. The elements of costs are stated in the standard.
 - (c) Subsequently, Property Plant and Equipment are carried at
 - (i) cost less depreciation less impairment loss, or
 - (ii) Revalued amount less post revaluation depreciation and impairment loss.
 - (d) Revaluation loss is charged to P&L (to revaluation surplus to the extent it already exists)
 - (e) Revaluation profit is credited to revaluation surplus (to P&L to reverse a revaluation loss charged to P&L before).
2. **Property, plant and equipment are tangible items that:**
 - (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and
 - (b) are expected to be used during more than one period.
3. **However, Ind AS 16 does not apply to**
 - (a) PPE classified as held for sale as per Ind AS 105
 - (b) Biological assets (other than bearer plants) related to agricultural activity (Ind AS 41)
 - (c) Assets in exploration for and evaluation of Mineral Resources (Ind AS 106)
 - (d) Mineral rights and mineral reserves such as oil, natural gas etc.
4. **Initial recognition at cost (i.e., at historical cost)**

The elements of costs are :

 - (a) Purchase Price—
 - i. trade discount and rebate are deducted
 - ii. duties and non-refundable taxes are added
 - iii. cash discount not subtracted

- iv. GST not added
 - v. only cash price to be recognized; if interest element is included in the price, that should be subtracted (unless capitalized as per Ind AS 23).
 - vi. if the asset is acquired in exchange of another asset, purchase price is the fair value of the asset acquired or the asset given up (the carrying amount of the asset given up when neither of the fair values is reliably measured).
- (b) Costs directly attributable to bringing the asset to its location and in the condition so as to make it available for its intended use —
- i. employee cost
 - ii. cost of preparing the site
 - iii. freight and delivery cost
 - iv. installation and assembly cost
 - v. costs during the test run
 - vi. Professional fees (Architects fees)
- (c) Dismantling cost —
- a. The estimated dismantling cost at present value.
 - b. Estimated cost of removing the item and restoring site at present value.
- (d) Elements of costs not included:
- i. Administration and general overhead.
 - ii. Advertising and promotion cost of a new product.
 - iii. Cost of relocating
 - iv. Initial losses when asset is operating at low level
 - v. Incidental cost not directly related to installation.

5. Subsequent measurement of carrying amount:

- (a) at cost less depreciation less impairment loss, or
- (b) at revalued amount at fair value less post revaluation depreciation and impairment loss.
- (c) addition of all capital expenditure to (a) or (b)
 - (i) expenditure which enhances the revenue generating capacity
 - (ii) cost of replacements
 - (iii) major inspection and overhauling expenses

6. Class of property, plant and equipment:

- a. Land
- b. Land and building
- c. Machinery
- d. Ships
- e. Aircraft
- f. Motor vehicles
- g. Furniture and fixtures
- h. Office equipment and
- i. Bearer plants.

7. Depreciation:

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. Depreciable amount is the cost of an asset or other amount substituted for cost, less its residual value. The revalued amount is one such other amount substituted for cost. The fair value on exchange is another such amount.

8. Methods of depreciation are:

- (a) The straight line method: Annual depreciation amount = Depreciable amount/ No. of years of useful life. It is a constant amount.
- (b) The reducing (diminishing) balance method: Annual depreciation is calculated at a fixed percentage on the carrying amount. The carrying amount is getting reduced over the years and at the end of useful life of the asset it becomes equal to the estimated residual value. Here the annual depreciation amount is reducing over the years.
- (c) The units of production method: Annual depreciation amount = (Annual production units/ Life time production units) × Depreciable amount.

9. Impairment Loss: It is dealt in Ind AS 36

Impairment Loss = Carrying amount less recoverable amount

Recoverable amount is the higher of the fair value of asset less cost to sell and the value in use. Fair value is defined in Ind AS 113. It is the exit value in an orderly transaction between market participants. Value in use is the entity specific value. It is the present value of all expected future cash flows from the asset.

10. Accounting of PPE: It involves—

- a. Recognition as non-current and as PPE classified as in Para 5.
- b. Measurement at initial cost
- c. Subsequent measurement based on initial cost or on subsequent revaluation for subsequent measurement of PPE two deductions are there—
 - (i) Depreciation
 - (ii) Impairment loss
- d. Presentation:
 - (i) PPE appears under non-current assets classified as per Para-5.
 - (ii) Revaluation profit/Loss is accounted through revaluation surplus a/c or P&L A/c.
 - (iii) Depreciation and impairment loss are accounted through P&L A/c.

11. 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.

The gain or loss arising from the derecognition of an item of property, plant and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

12. Disclosure: The financial statements shall make necessary disclosures as required in the Ind AS- 16.

The financial statements shall disclose, for each class of property, plant and equipment:

- (a) the depreciation methods used;
- (b) the useful lives or the depreciation rates used;
- (c) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period; and
- (d) 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.

13. Illustrative Examples:

Illustration 4

X Ltd. Sets up a plant at the purchase price of ₹5,00,000 plus GST at 18% (Intra-state). Freight paid ₹ 20,000 plus GST at 18% (Intra-state). Paid ₹10,000 as employee expenses for installation of the plant. After the plant was put to use maintenance cost incurred ₹ 5,000. Measure the initial cost to be recognized and pass journal. Estimated dismantling cost ₹30,000, present value ₹12,000.

Solution:

An asset is recognized in the class Machinery under the item PPE in the non-current group of assets. The initial cost of the asset is measured as —

Particulars	(₹)
Purchase Price	5,00,000

Particulars	(₹)
Freight	20,000
Installation cost	10,000
Present value of dismantling cost	12,000
	5,42,000

GST and maintenance cost not to be recognized in initial cost of asset.

Journal		Dr.	Cr.
Particulars		(₹)	(₹)
Machinery A/c	Dr.	5,42,000	
Input CGST A/c	Dr.	46,800	
Input SGST A/c	Dr.	46,800	
Maintenance Exp. A/c	Dr.	5,000	
To, Bank A/c			6,28,600
To Liability for Dismantling A/c			12,000

Working:

GST	State (9%)	Central (9%)
On ₹5,00,000	₹45,000	₹45,000
On ₹ 20,000	₹1,800	₹1,800
Total	₹46,800	₹46,800

Illustration 5

B Ltd. has incurred the following transactions in respect of acquiring a plant is exchange of an old plant :

- (i) The old site was dismantled at a cost of ₹ 8,000, No estimated dismantling cost was capitalized for the old plant. Scrap from the old site sold at ₹ 1,000.
- (ii) The new site was constructed at a cost of ₹ 48,000.
- (iii) The supplier of the new plant agreed to take away the old plant at fair value of ₹ 1,26,000.
- (iv) The new plant price was ₹ 3,20,000. The carrying amount of the old plant was ₹ 1,00,000.
- (v) The present value estimate of dismantling the site is ₹ 16,000.
- (vi) Wages paid for installation of the plant ₹ 4,000 for trial run ₹1,600.
- (vii) Freight paid ₹ 8,000.
- (viii) GST applies on supply of plant of 18% (Intra state) and on freight at 18% (intra state)
- (ix) Loss amounted to ₹40,000 for low capacity utilization of the plant after installation.
- (x) ₹ 10,000 was paid as cost of launching the product to be produced from the plant. Recognise the asset value and pass journal.

Solution:

Asset is recognized in the class Machinery under PPE as non-current asset. It is valued at initial cost measured as follows :

Particulars	(₹)
Cost of construction of new site	48,000
Price of the new plant	3,20,000
Present value estimate of dismantling the site	16,000
Installation and trial Run	5,600
Freight	8,000
Machinery at initial cost :	3,97,600

Particulars	Dr. (₹)	Cr. (₹)
Old Machinery A/c To, Cash A/c (Dismantling of old sets)	Dr. 8,000	8,000
Cast A/c To, Old Machinery A/c (Scrap realized)	Dr. 1,000	1,000
Machinery (New) A/c To, Old Machinery A/c.(1,00,000 + 8,000 – 1,000) To, Profit on Sale of Old Plant A/c (1,26,000 – 1,07,000) To, Supplier A/c or Cash A/c (3,20,000 – 1,26,000) To Cash A/c (Freight installation + construction of site) To Liability for dismantling A/c	Dr. 3,97,600	1,07,000 19,000 1,94,000 61,600 16,000

Note : (ix) Loss ₹40000 and (x) cost of launching product ₹10,000 are charged to Profit and Loss A/c.

2. GST accounting has not been shown.

Illustration 6

A Ltd. Purchased an aircraft at a price of ₹6,300 crores that requires major inspection and overhauling every 4 years. The estimated life of the aircraft is 15 years. The aircraft was purchased in 2015 and major inspection and overhauling made in 2019 at a cost of ₹ 100 crores. In 2020 A Ltd. Further incurred repair and maintenance in the engine to raise it capacity by 10% amounting to ₹ 70 crores. One worn out component in the wing was replaced in 2020 at a cost of ₹ 80 crores. The carrying amount of the old component was ₹ 30 crores. Scrap realized ₹ 12 crores. find the amount to be recognized as expense and as asset in 2019 and in 2020 and also show the carrying amount. The aircraft residual value is estimated at ₹ 300 crores.

(₹in Crore)

Solution:

	Expense	Asset	
		Recognised	Carrying amount
In 2018			
Depreciation ₹(6,300 - 300)/15	400		
Carrying amount			4,700 (6300 - 4×400)
In 2019			
Depreciation = ₹400 + (₹100/4)	425		
Major Inspection overhauling		100	
Carrying amount [₹4,700 + ₹100 - ₹425]			4,375
In 2020			
Depreciation	425		
Repair & Maintenance (Capacity increase)		70	
Replacement		80	
Old component derecognized		(30)	
loss on disposal of old component ₹(30 - 12)	18		
Carrying amount (₹4,375 + ₹70 + ₹80 - ₹30 - ₹437)			4,058

Notes :

1. Depreciation At straight line for 15 years useful life.
2. Major inspection and overhauling capitalized and depreciated at straight line for 4 years.
3. Repair & maintenance and replacement of old component depreciated at straight line for residual life i.e. 15-5=10 years.
4. Full depreciation is changed in the year it is recognized.

Illustration 7

X Ltd. Purchased a machine at a price of ₹ 1,200 Lakhs. It paid freight 40 and installation cost ₹ 80 Lakhs. IGST paid at 18%. Share of general overhead ascertained for the trial run of the machine ₹ 30 Lakhs. The labour cost and direct expenses for trial run is ₹ 60 Lakhs. The machine has been put to use on 01.04.2019.

The estimated dismantling cost of the machine at the end of its useful life of 10 years is ₹ 400 Lakhs. Discounting rate to be applied is 5%. [PV estimated at ₹ 246 Lakhs]

The machine requires major over hauling every 2 years at cost of ₹ 26 lakhs.

Pass journal entries and accounting treatments for the year 2019-20 and 2020-21.

Solution:**Working note 1: Initial Cost Recognized**

Particulars	₹ in Lakhs	₹ in Lakhs
Purchase Price	1,200	
Freight	40	
Installation Cost		80
IGST not considered		—
General overhead not considered		—
Labour cost and expense for trial run		60
P.V. of estimated dismantling cost		2,46
Depreciable amount		1,626
Less: Overhauling cost		26 to be depreciated in 2 years
Balance		1,600 to be depreciated in 10 years
Annual depreciation ₹13 + ₹160 = ₹173		

Working note 2:

P.V. of Dismantling Cost		= ₹ 246 Lakhs
5% discounting unwinded in year 1	= ₹ 246 Lakhs × 5%	= ₹ 12.3 Lakhs
Provision for dismantling cost is revised to	= ₹ 246 Lakhs + ₹12.3 Lakhs	= ₹ 258.3 Lakhs
Discount unwinded in year 2	= ₹ 258.3 Lakhs × 5%	= ₹ 12.92 Lakhs (Approx)
And prov. for dismantling cost is raised to	= ₹258.3 Lakhs + ₹12.92 Lakhs	= ₹ 271.22 Lakhs

Illustration 8

Alfa Ltd. Has machinery at cost ₹ 4,800 and provision for depreciation ₹ 1,600 as on 01.04.2018. On that date the remaining life of the machine is 6 years with residual value of ₹ 800. On the same date one component of the machine is replaced, the price of the new component is ₹ 600 and the cost of the old component was ₹ 500 with accumulated depreciation ₹ 200. The supplier of the new component took the old component at a fair value of ₹ 360.

On 31.03.2019 the machine is revalued as per company policy at ₹ 5000. On 31.03.2020 an impairment loss of ₹ 900 has been recognized for the machine. Pass journal entries and show the accounting treatments to be made in the financial statement for the years ending on 31.03.2019, 31.03.2020 and 31.30.2021. Depreciation to be charged based on straight line method.

Solution:

Working note-1

Particulars	(₹)	(₹)
On 1.4.2018 : Carrying amount ₹ (4,800 – 1,600)		
Add. Replacement Cost of New Component (600 - Carrying amount of old ₹ 500 – ₹ 200 i.e ₹ 300) [Profit on disposal of old machinery = ₹ 360 – ₹ 300 = ₹ 60]	300	
Carrying amount	3,500	
Depreciation for 2018-2019 : ₹(3,500 – ₹ 800)/6 [Carrying amount – residual value] ÷ Life]	(450)	
On 31.03.2019 Depreciated value		3,050
On 31.03.2019 : Revalued at	5,000	
Depreciation for 2019-2020 (₹ 450 + ₹ 1950/5)	(840)	
Depreciated value ₹ (5,000 – 840)	4,160	
Less: Impairment Loss	(900)	
On 31.03.2020 Carrying amount after Impairment		3,260
Depreciation. For 2020-2021: ₹ (3,260 – 800)/4		615

Note :

- 1/5th of Revaluation surplus is to be transferred from Revaluation Surplus other compre (OCI) to Retained earnings for 2018-19 [as depreciation (1/5th) is realized]
- Impairment loss is charged to P & L a/c but as Revaluation Surplus exists it is charged to Revaluation surplus on 31.03.2020.

Journal			Dr.	Cr.
Date	Particulars		(₹)	(₹)
01.04.2018	Machinery A/c To, Supplier A/c	Dr.	600	600
	Prov. for Depreciation A/c Supplier A/c To, Machinery A/c To, Profit on Disposal of Machinery A/c	Dr. Dr.	200 360	500 60
31.03.19	Depreciation A/c To, Provision for Depreciation A/c	Dr.	450	450
31.03.19	Machinery A/c Provision for Depn. A/c To, Revaluation Surplus A/c	Dr. Dr.	100 1,850	1,950

Date	Particulars		(₹)	(₹)
31.03.20	Depreciation A/c To, Provision for Depreciation A/c	Dr.	840	840
	Impairment loss A/c To, Machinery A/c.	Dr.	900	900
31.03.21	Depreciation A/c To, Provision for Depreciation A/c	Dr.	615	615

Accounting treatment to be shown in the financial statements :

On 31.03.2019

In Statement of P & L —

- (i) Profit on disposal of machinery is shown as income ₹ 60
- (ii) Annual depreciation is shown as expense ₹ 450
- (iii) Revaluation surplus recognized as other comprehensive Income ₹ 1,950

In Balance Sheet—

- (i) Machinery is shown under PPE ₹ 5,000 (Revalued)
- (ii) Provision for depn. NIL
- (iii) Revaluation surplus is recognized as other comprehensive income and shown under other equity.

On 31.03.2020

In Statement of P & L—

- (i) Annual Depreciation is shown as expense ₹ 840
- (ii) Revaluation surplus as OCI is reduced for impairment loss ₹ 900
- (iii) Transfer from Revaluation profit to retained Earnings ₹ 390

In Balance Sheet—

- (i) Machinery is shown under PPE ₹ 4,100
- (ii) Provision for depreciation ₹ 840
- (iii) Revaluation surplus under other equity ₹ 660 (₹ 1,950 – ₹ 390 ₹ 900)

On 31.03.2021

In Statement of P & L—

- (i) Depreciation ₹ 615
- (ii) Transfer from revaluation profit to retained earning's 1/4th × ₹ 660 = ₹ 165

In Balance Sheet—

- (i) Machinery ₹ 4,100
- (ii) Prov. for Depn. ₹ (840 + 615) = ₹ 1,455
- (iii) Revaluation Profit under other equity = ₹ 660 – ₹ 165 = ₹ 495

This Standard sets out the principles for the recognition, measurement, presentation and disclosure of leases. The objective is to ensure that lessees and lessors provide relevant information in a manner that faithfully represents those transactions. This information gives a basis for users of financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of an entity. 2 An entity shall consider the terms and conditions of contracts and all relevant facts and circumstances when applying this Standard. An entity shall apply this Standard consistently to contracts with similar characteristics and in similar circumstances.

At inception of a contract, an entity shall assess whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the **right to control the use of an identified asset** for a period of time in exchange for consideration.

To assess whether a contract conveys the right to control the use of an identified for a period of time, an entity shall assess whether, throughout the period of use, the customer has both of the following:

- (a) the right to obtain substantially all of the economic benefits from use of the identified asset; and
- (b) the right to direct the use of the identified asset.

Accounting of leases in the books of the Lessee:

At the commencement date, the lessee shall recognise (I) a right-of-use asset and (II) a lease liability.

Exemption: A lessee may elect not to recognise under this standard

- (i) short-term leases; and
- (ii) leases for which the underlying asset is of low value.

No asset/ liability recognized under Ind AS 116 if the contract is not, does not contain a lease.

At the commencement date, **a lessee shall measure the right-of-use (ROU) of asset at cost.**

The cost of the right-of-use of asset shall comprise:

- (i) the amount of the initial measurement of the lease liability
- (ii) any lease payments made at or before the commencement date, less any lease incentives received;
- (iii) any initial direct costs incurred by the lessee; and
- (iv) an estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset.

At the commencement date, a lessee shall measure the lease liability at the present value of the lease payments that are not paid at that date. **The lease payments shall be discounted using the interest rate implicit in the**

lease, if that rate can be readily determined. If that rate cannot be readily determined, the lessee shall use the lessee's incremental borrowing rate.

At the commencement date, the **lease payments included in the measurement of the lease liability** comprise the following payments for the right to use the underlying asset during the lease term that are not paid at the commencement date:

- (i) fixed payments (including in-substance fixed payments as described in paragraph B42), less any lease incentives receivable;
- (ii) variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- (iii) amounts expected to be payable by the lessee under residual value guarantees;
- (iv) the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- (v) payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

After the commencement date, a lessee shall measure the right-of-use asset applying a cost model, unless it applies the revaluation model as applied to the particular class of PPE.

To apply a cost model, a lessee shall measure the right-of-use asset at cost: (a) less any accumulated depreciation and any accumulated impairment losses; and (b) adjusted for any remeasurement of the lease liability specified.

A lessee shall apply the depreciation requirements in Ind AS 16, Property, Plant and Equipment, in depreciating the right-of-use asset (for the lease term or the useful life based on the lease condition).

If during lease any increase or decrease in liability arises when there exists a balance in ROU, to that extent ROU will be debited/credited and the balance would be transferred to P&L.

A lessee shall either present in the Balance Sheet, or disclose in the notes:

- (a) right-of-use assets separately from other assets.** If a lessee does not present right-of-use assets separately in the balance sheet, the lessee shall:
 - (i) include right-of-use assets within the same line item as that within which the corresponding underlying assets would be presented if they were owned; and
 - (ii) disclose which line items in the balance sheet include those right-of-use assets.
- (b) lease liabilities separately from other liabilities.** If a lessee does not present lease liabilities separately in the balance sheet, the lessee shall disclose which line items in the balance sheet include those liabilities.

The above requirement does not apply to right-of-use assets that meet the definition of investment property, which shall be presented in the balance sheet as investment property.

In the statement of profit and loss, a lessee shall present interest expense on the lease liability separately from the depreciation charge for the right-of-use asset. Interest expense on the lease liability is a component of finance costs, to be presented separately in the statement of profit and loss.

In the statement of cash flows, a lessee shall classify:

- (a) cash payments for the principal portion of the lease liability within financing activities;
- (b) cash payments for the interest portion of the lease liability within financing activities applying the requirements in Ind AS 7, Statement of Cash Flows, for interest paid; and

- (c) short-term lease payments, payments for leases of low-value assets and variable lease payments not included in the measurement of the lease liability within operating activities.
- (d) Any payments of unrecognized lease arrangement should also be treated like (c).

Accounting of leases in the books of the Lessor:

A lessor shall classify each of its leases as either an operating lease or a finance lease.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset.

A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset.

Finance Lease

Whether a lease is a finance lease or an operating lease depends on the substance of the transaction rather than the form of the contract. Examples of situations that individually or in combination would normally lead to a lease being classified as a **finance lease** are:

- (a) the lease transfers ownership of the underlying asset to the lessee by the end of the lease term;
- (b) the lessee has the option to purchase the underlying asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception date, that the option will be exercised;
- (c) the lease term is for the major part of the economic life of the underlying asset even if title is not transferred;
- (d) at the inception date, the present value of the lease payments amounts to at least substantially all of the fair value of the underlying asset; and
- (e) the underlying asset is of such a specialised nature that only the lessee can use it without major modifications.

The net investment in the lease consists of the present value of the lease payments plus the present value of the guaranteed residual value, both discounted at the interest rate implicit in the lease, plus the present value of unguaranteed residual value, less deferred selling profit. (Deferred selling profit is calculated as the lease receivable less the carrying amount of the underlying asset, net of unguaranteed residual.) It may be mentioned that the net investment in the lease is subject to the same considerations as other assets when classifying its components as current or noncurrent assets in the balance sheet.

Interest income includes interest on the lease receivable, accretion of the unguaranteed residual value and amortisation of deferred selling profit. The rate for recognising interest income to produce a constant periodic rate of return on the remaining net investment is IRR.

Operating Lease

A lessor shall recognise lease payments from operating leases as income on either a straight-line basis or another systematic basis. The lessor shall apply another systematic basis if that basis is more representative of the pattern in which benefit from the use of the underlying asset is diminished.

A lessor shall recognise costs, including depreciation, incurred in earning the lease income as an expense.

A lessor shall add initial direct costs incurred in obtaining an operating lease to the carrying amount of the underlying asset and recognise those costs as an expense over the lease term on the same basis as the lease income.

The depreciation policy for depreciable underlying assets subject to operating leases shall be consistent with the lessor's normal depreciation policy for similar assets. A lessor shall calculate depreciation in accordance with Ind AS 16 and Ind AS 38.

A lessor shall apply Ind AS 36 to determine whether an underlying asset subject to an operating lease is impaired and to account for any impairment loss identified.

A manufacturer or dealer lessor does not recognise any selling profit on entering into an operating lease because it is not the equivalent of a sale.

Presentation

A lessor shall present underlying assets subject to operating leases in its balance sheet according to the nature of the underlying asset.

Disclosure

The objective of the disclosures is for lessors to disclose information in the notes that, together with the information provided in the balance sheet, statement of profit or loss and statement of cash flows, gives a basis for users of financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of the lessor.

A lessor shall disclose the following amounts for the reporting period:

- for finance leases: (i) selling profit or loss; (ii) finance income on the net investment in the lease; and (iii) income relating to variable lease payments not included in the measurement of the net investment in the lease.
- for operating leases, lease income, separately disclosing income relating to variable lease payments that do not depend on an index or a rate.

Illustration 9

Lessor Y leases out an equipment (carrying amount ₹ 1,36,000 having 5 years life) to Lessee X for 3 years for annual payment of ₹ 50,000 (at the end of every year) and residual value of ₹50,000, guaranteed by X up to loss of ₹ 30,000. Interest rate implicit is 10%. At the end of the lease the equipment is valued at ₹ 33,000. Show accounting in books of X. Interest rate implicit in lease payments is 10%. At the end of the lease the equipment is valued at ₹ 33,000. Show accounting of lease classified as finance lease in books of Y. The rate of interest income on the net investment in lease, however, is 19.274%.

Solution:

In books of Lessee X:

At 10% implicit rate of interest the (Right-of-use) ROU Asset and Lease Liability are initially recognised at present value of payments as shown below.

Year	Payments (₹)	Disc. Factor	DCF at 10% (₹)
1	50,000	0.90909091	45,454.55
2	50,000	0.82644628	41,322.31
3	50,000	0.7513148	37,565.74

Year	Payments (₹)	Disc. Factor	DCF at 10% (₹)
3	Guaranteed 30,000	0.7513148	22,539.44
Present value			1,46,882

Lease Liability repayment and interest

Year	Interest (₹)	Payments/remission (₹)	Balance (₹)
0			1,46,882
1	14,688.2	50,000	1,11,570.2
2	11,157.02	50,000	72,727.27
3	7,272.727	50,000	30,000
3	0	17,000 guarantee payments (50,000 – 33,000)	13,000
3	0	13,000 guarantee remissions (30,000 – 17,000)	0

ROU Asset Depreciation for the lease period

Year	Depreciation Straight line (₹)	Balance (₹)
0		1,46,882
1	48,961	97,921
2	48,961	48,960
3	48,960	0

After the commencement date, a lessee shall measure the right-of-use asset applying a cost model, unless it applies the revaluation model as applied to the particular class of PPE.

To apply a cost model, a lessee shall measure the right-of-use asset at cost: (a) less any accumulated depreciation and any accumulated impairment losses; and (b) adjusted for any remeasurement of the lease liability specified.

A lessee shall **apply the depreciation requirements in Ind AS 16, Property, Plant and Equipment**, in depreciating the right-of-use asset (for the lease term or the useful life based on the lease condition).

Journal		Dr.	Cr.
	Particulars	(₹)	(₹)
At inception	ROU Asset A/c To, Lease Liability A/c	Dr. 1,46,882	1,46,882
At the end of Year 1	Interest Expenses A/c To, Lease Liability A/c	Dr. 14,688	14,688
	Lease Liability A/c To, Bank A/c	Dr. 50,000	50,000

	Particulars		(₹)	(₹)
	Depreciation A/c To, ROU Asset	Dr.	48,961	48,961
At the end of Year 2	Interest Expenses A/c To, Lease Liability A/c	Dr.	11,157	11,157
	Lease Liability A/c To, Bank A/c	Dr.	50,000	50,000
	Depreciation A/c To, ROU Asset	Dr.	48,961	48,961
At the end of Year 3	Interest Expenses A/c To, Lease Liability A/c	Dr.	7,273	7,273
	Lease Liability A/c To, Bank A/c	Dr.	50,000	50,000
	Depreciation A/c To, ROU Asset A/c	Dr.	48,960	48,960
	Lease Liability A/c To, Bank A/c (₹50,000 – ₹33,000 = ₹17,000, guaranteed up to ₹30,000) To, P&L (liability remission) ##	Dr.	30,000	17,000 13,000

if during lease any increase or decrease in liability arises when there exists a balance in ROU, to that extent ROU will be debited/credited instead of P&L.

Presented in the Financial Statements:

Balance Sheet

Particulars	At the end of Year 1 (₹)	At the end of Year 2 (₹)	At the end of Year 3 (₹)
ROU Asset	97,921	48,960	0
Lease Liability	1,11,570	72,727	0

Statement of P&L

(Amount in ₹)

		Year 1	Year 2	Year 3
Interest A/c	Dr.	14,688	11,157	7,273
Depreciation A/c	Dr.	48,961	48,961	48,960
Guarantee remission A/c	Cr.			13,000

Statement of Cash Flows

(Amount in ₹)

	Year 1	Year 2	Year 3
Cash used in financing activities	50,000	50,000	50,000
Cash used in financing activities			17,000

I may take up accounting of leases in the books of the lessor in another issue.

In the books of Y

Working notes:

(a) present value of lease receivable = ₹1,46,882 (Amount in ₹)

Year	Payments	Disc. Factor	DCF at 10%
1	50,000	0.90909091	45,454.55
2	50,000	0.82644628	41,322.31
3	50,000	0.7513148	37,565.74
3	Guaranteed 30,000	0.7513148	22,539.44
Present value			1,46,882

(b) Deferred selling profits at inception:

Particulars	(₹)
Revenue = Present value of lease receivable	1,46,882
Cost of goods sold = 136000 – 15026 (Carrying amount - Present Value of Unguaranteed residual*)	1,20,974
Deferred selling profits at inception	25,908

*₹20,000 × 0.7513 = ₹15,026

(c) Net Investment in Lease at inception = Present value of lease receivable + P. V. of Unguaranteed residual – Deferred selling profits = ₹ 1,46,882 + ₹ 15,026 – ₹ 25,908 = ₹ 1,36,000 = Carrying amount of the underlying asset.

(d) Interest income on net investment in lease (19.274%) includes interest on the lease receivable, accretion of the unguaranteed residual value and amortisation of deferred selling profit.

Interest Income	(₹)
Net Investment in Lease	1,36,000
Add Interest Income @ 19.274% = ₹ 1,36,000 × 19.274%	26,213
Total	1,62,213
Less Payment	50,000
Balance at the end of year 1	1,12,213

Interest Income	(₹)
Add Interest Income @ 19.274% = ₹1,12,213 × 19.274%	21,628
Total	1,33,841
Less Payment	50,000
Balance at the end of year 2	83,841
Add Interest Income @ 19.274% = ₹83,841 × 19.274%	16,159
Total	1,00,000
Less Payment	50,000
Less Payment for Guaranteed loss borne by Lessee	17,000
Returned at residual value at the end of year 3	33,000

Journal		Dr.	Cr.
Date	Particulars	(₹)	(₹)
At the inception	Net Investment in Lease A/c Dr.	1,36,000	
	To, PPE		1,36,000
At the end of year 1	Bank A/c Dr.	50,000	
	To, Interest Income A/c		26,213
	To, Net Investment in Lease A/c [50,000 – 26,213]		23,787
At the end of year 2	Bank A/c Dr.	50,000	
	To, Interest Income A/c		21,628
	To, Net Investment in Lease A/c		28,372
At the end of year 3	Bank A/c Dr.	50,000	
	To, Interest Income A/c		16,159
	To, Net Investment in Lease A/c		33,841
	PPE A/c Dr.	33,000	
	Bank A/c Dr.#	17,000	
	To, Net Investment in Lease A/c		50,000

Residual Value = ₹33,000. Loss = ₹50,000 – ₹33,000 = ₹17,000 borne by lessee (guaranteed by lessee up to ₹30,000) (Amount in ₹)

P&L	Year 1	Year 2	Year 3
Interest Income	26,213	21,628	16,159

Balance sheet	At inception	At the end of Year 1 (₹)	At the end of Year 2 (₹)	At the end of Year 3 (₹)
Net Investment in Lease	1,36,000	1,12,213	83,841	0
PPE	(1,36,000)			+33,000
Cash				+17,000

Statement of Cash Flows	At the end of Year 1 (₹)	At the end of Year 2 (₹)	At the end of Year 3 (₹)
Cash from investing activities	50,000	50,000	50,000
Cash from investing activities			17,000

The Effects of Changes in Foreign Exchange Rates (Ind AS 21)

1.5

The objective of this Standard is to prescribe how to include foreign currency transactions and foreign operations in the financial statements of an entity and how to translate financial statements into a presentation currency.

1. The objective of this Standard is to prescribe how to include foreign currency transactions and foreign operations in the financial statements of an entity and how to translate financial statements into a presentation currency.

This Standard shall be applied:

- (a) in accounting for transactions and balances in foreign currencies, except for those derivative transactions and balances that are within the scope of Ind AS 109, Financial Instruments;
- (b) in translating the results and financial position of foreign operations that are included in the financial statements of the entity by consolidation or the equity method; and
- (c) in translating an entity's results and financial position into a presentation currency.

In preparing financial statements, each entity translates foreign currency items into its functional currency and reports the effects of such translation.

Initial recognition

A foreign currency transaction is a transaction that is denominated or requires settlement in a foreign currency, including transactions arising when an entity:

- (a) buys or sells goods or services whose price is denominated in a foreign currency;
- (b) borrows or lends funds when the amounts payable or receivable are denominated in a foreign currency; or
- (c) otherwise acquires or disposes of assets, or incurs or settles liabilities, denominated in a foreign currency.

A foreign currency transaction shall be recorded, on initial recognition in the functional currency, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

2. **Reporting at the ends of subsequent reporting periods:** At the end of each reporting period: (a) foreign currency monetary items shall be translated using the closing rate; (b) non-monetary items that are measured in terms of historical cost in a foreign currency shall be translated using the exchange rate at the date of the transaction; and (c) non-monetary items that are measured at fair value in a foreign currency shall be translated using the exchange rates at the date when the fair value was measured.
3. The carrying amount of some items is determined by comparing two or more amounts. For example, the carrying amount of inventories is the lower of cost and net realisable value in accordance with Ind AS 2 Inventories. Similarly, in accordance with Ind AS 36 Impairment of Assets, the carrying amount of an asset

for which there is an indication of impairment is the lower of its carrying amount before considering possible impairment losses and its recoverable amount. When such an asset is non-monetary and is measured in a foreign currency, the carrying amount is determined by comparing:

- (a) the cost or carrying amount, as appropriate, translated at the exchange rate at the date when that amount was determined (i.e. the rate at the date of the transaction for an item measured in terms of historical cost); and
- (b) the net realisable value or recoverable amount, as appropriate, translated at the exchange rate at the date when that value was determined (eg the closing rate at the end of the reporting period). The effect of this comparison may be that an impairment loss is recognised in the functional currency but would not be recognised in the foreign currency, or vice versa.

Example 1: (impairment loss)

Entity A's functional currency is Rupee. It has a building located in US acquired at a cost of US\$ 20,000 when the exchange rate was US\$ 1 = ₹ 60. The building is carried at cost in the financial statements of Entity A. For the purpose of this example depreciation is ignored. At the balance sheet date, there is an indication of impairment for this building. Consequently, an impairment test has been made in accordance with Ind AS 36 as at the balance sheet date and the recoverable amount of the building is determined to be US\$ 19,000. The exchange rate as at the balance sheet date is US\$ 1 = ₹ 64. Cost translated at the exchange rate on the date of acquisition US\$ 20,000 @ ₹ 60 per US\$ is ₹ 12,00,000. Recoverable amount translated at the exchange rate on the balance sheet date - US\$ 19,000 @ ₹ 64 per US\$ is ₹ 12,16,000. Though there is an impairment loss of US\$ 1000 (US\$ 20,000 - US\$ 19,000) in terms of foreign currency, there is no impairment loss in terms of functional currency. This is because, recoverable amount in terms of functional currency (₹ 12,16,000) exceeds carrying amount (ie cost in this example) in terms of functional currency (₹ 12,00,000). Hence, no impairment loss is recognised for the building.

4. Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements shall be recognised in profit or loss in the period in which they arise.
5. When monetary items arise from a foreign currency transaction and there is a change in the exchange rate between the transaction date and the date of settlement, an exchange difference results. When the transaction is settled within the same accounting period as that in which it occurred, all the exchange difference is recognised in that period. However, when the transaction is settled in a subsequent accounting period, the exchange difference recognised in each period up to the date of settlement is determined by the change in exchange rates during each period. When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss shall be recognised in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised in profit or loss, any exchange component of that gain or loss shall be recognised in profit or loss.
6. Exchange differences arising on a monetary item that forms part of a reporting entity's net investment in a foreign operation shall be recognised in profit or loss in the separate financial statements of the reporting entity or the individual financial statements of the foreign operation, as appropriate. In the financial statements that include the foreign operation and the reporting entity (eg consolidated financial statements when the foreign operation is a subsidiary), such exchange differences shall be recognised initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.
7. When a monetary item forms part of a reporting entity's net investment in a foreign operation and is denominated in the functional currency of the reporting entity, an exchange difference arises in the foreign operation's individual financial statements. If such an item is denominated in the functional currency of the foreign operation, an exchange difference arises in the reporting entity's separate financial statements. If

such an item is denominated in a currency other than the functional currency of either the reporting entity or the foreign operation, an exchange difference arises in the reporting entity's separate financial statements and in the foreign operation's individual financial statements. Such exchange differences are recognised in other comprehensive income in the financial statements that include the foreign operation and the reporting entity (i.e. financial statements in which the foreign operation is consolidated, proportionately consolidated or accounted for using the equity method).

Example 2:

Entity P has a foreign subsidiary Entity S1. The functional currencies of Entities P and S1 are Rupee and US\$ respectively. Accounting Year of both the entities ends on March 31. The presentation currency for Entity P's separate as well as consolidated financial statements is Rupee. Entity S1 owes to Entity P US\$2,000 towards a loan obtained some years back. Exchange rates as at 31 March 20X0 and 31 March 20X1 were US\$ 1= ₹ 58 and US\$ 1= ₹ 60 respectively. In the above situation, in the individual financial statements of Entity S1, no exchange difference arises on the loan since it is denominated in its own functional currency. In the separate financial statements of Entity P, an exchange gain of ₹ 4,000 arises as shown below: Loan asset of US\$2,000 translated @ exchange rate as at 31 March 20X1(₹ 60 per US\$) is ₹ 1,20,000 @ exchange rate as at 31 March 20X0(₹ 58 per US\$) 1,16,000 Exchange gain ₹ 4,000. In the consolidated financial statements of Entity P, the exchange gain of ₹ 4,000 will be recognised in other comprehensive income and accumulated in equity.

8. When there is a change in an entity's functional currency, the entity shall apply the translation procedures applicable to the new functional currency prospectively from the date of the change.
The results and financial position of an entity whose functional currency is not the currency of a hyperinflationary economy shall be translated into a different presentation currency using the following procedures:
 - (a) assets and liabilities for each balance sheet presented (ie including comparatives) shall be translated at the closing rate at the date of that balance sheet;
 - (b) income and expenses for each statement of profit and loss presented (ie including comparatives) shall be translated at exchange rates at the dates of the transactions; and
 - (c) all resulting exchange differ.
9. Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation shall be treated as assets and liabilities of the foreign operation. Thus they shall be expressed in the functional currency of the foreign operation and shall be translated at the closing rate.
10. On the partial disposal of a subsidiary that includes a foreign operation, the entity shall re-attribute the proportionate share of the cumulative amount of the exchange differences recognised in other comprehensive income to the non-controlling interests in that foreign operation. In any other partial disposal of a foreign operation the entity shall reclassify to profit or loss only the proportionate share of the cumulative amount of the exchange differences recognised in other comprehensive income.
11. Gains and losses on foreign currency transactions and exchange differences arising on translating the results and financial position of an entity (including a foreign operation) into a different currency may have tax effects. Ind AS 12 Income Taxes applies to these tax effects.
12. An entity shall disclose:
 - (a) the amount of exchange differences recognised in profit or loss except for those arising on financial instruments measured at fair value through profit or loss in accordance with Ind AS 39;

- (b) net exchange differences recognised in other comprehensive income and accumulated in a separate component of equity, and a reconciliation of the amount of such exchange differences at the beginning and end of the period; and
- (c) net exchange differences recognised directly in equity and accumulated in a separate component of equity, and a reconciliation of the amount of such exchange differences at the beginning and end of the period.

When the presentation currency is different from the functional currency, that fact shall be stated, together with disclosure of the functional currency and the reason for using a different presentation currency.

13. When there is a change in the functional currency of either the reporting entity or a significant foreign operation, that fact, the reason for the change in functional currency and the date of change in functional currency shall be disclosed.

The effect of a change in functional currency is accounted for prospectively. In other words, an entity translates all items into the new functional currency using the exchange rate at the date of the change. The resulting translated amounts for non-monetary items are treated as their historical cost. Exchange differences arising from the translation of a foreign operation previously recognised in other comprehensive income are not reclassified from equity to profit or loss until the disposal of the operation.

14. When an entity presents its financial statements in a currency that is different from its functional currency, it shall describe the financial statements as complying with Indian Accounting Standards only if they comply with all the requirements of each applicable Standard

When an entity displays its financial statements or other financial information in a currency that is different from either its functional currency or its presentation currency, it shall:

- (a) clearly identify the information as supplementary information to distinguish it from the information that complies with Indian Accounting Standards;
- (b) disclose the currency in which the supplementary information is displayed; and
- (c) disclose the entity's functional currency and the method of translation used to determine the supplementary information.

Borrowing Costs (Ind AS 23)

1.6

Objective of this standard is to provide principles for recognising borrowing costs as asset or expense depending on the circumstances.

1. An entity shall apply this Standard in accounting for borrowing costs.
2. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset form part of the cost of that asset. Other borrowing costs are recognised as an expense.
 - 2.1. The Standard does not deal with the actual or imputed cost of equity, including preferred capital not classified as a liability.
 - 2.2. An entity is not required to apply the Standard to borrowing costs directly attributable to the acquisition, construction or production of: (a) a qualifying asset measured at fair value, for example, a biological asset; or (b) inventories that are manufactured, or otherwise produced, in large quantities on a repetitive basis.
3. A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.
4. Borrowing costs are interest and other costs that an entity incurs in connection with the borrowing of funds.
 - 4.1. Borrowing costs may include: (a) interest expense calculated using the effective interest method as described in Ind AS 39 Financial Instruments: Recognition and Measurement; (b) finance charges in respect of finance leases recognised in accordance with Leases; and (c) exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.
 - 4.2. With regard to exchange difference required to be treated as borrowing costs the manner of arriving at the adjustments stated therein shall be as follows:
 - (i) the adjustment should be of an amount which is equivalent to the extent to which the exchange loss does not exceed the difference between the cost of borrowing in functional currency when compared to the cost of borrowing in a foreign currency.
 - (ii) where there is an unrealised exchange loss which is treated as an adjustment to interest and subsequently there is a realised or unrealised gain in respect of the settlement or translation of the same borrowing, the gain to the extent of the loss previously recognised as an adjustment should also be recognised as an adjustment to interest.”
5. An entity shall capitalise borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. An entity shall recognise other borrowing costs as an expense in the period in which it incurs them.
 - 5.1. To the extent that an entity borrows funds specifically for the purpose of obtaining a qualifying asset, the entity shall determine the amount of borrowing costs eligible for capitalisation as the actual

borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings.

- 5.2. To the extent that an entity borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the entity shall determine the amount of borrowing costs eligible for capitalisation by applying a capitalisation rate to the expenditures on that asset. The capitalisation rate shall be the weighted average of the borrowing costs applicable to the borrowings of the entity that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that an entity capitalises during a period shall not exceed the amount of borrowing costs it incurred during that period.
 - 5.3. An entity shall begin capitalising borrowing costs as part of the cost of a qualifying asset on the commencement date. The commencement date for capitalisation is the date when the entity first meets all of the following conditions:
 - (a) it incurs expenditures for the asset;
 - (b) it incurs borrowing costs; and
 - (c) it undertakes activities that are necessary to prepare the asset for its intended use or sale.
 - 5.4. An entity shall suspend capitalisation of borrowing costs during extended periods in which it suspends active development of a qualifying asset.
 - 5.5. An entity shall cease capitalising borrowing costs when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.
 - 5.6. When an entity completes the construction of a qualifying asset in parts and each part is capable of being used while construction continues on other parts, the entity shall cease capitalising borrowing costs when it completes substantially all the activities necessary to prepare that part for its intended use or sale.
6. An entity shall disclose:
 - (a) the amount of borrowing costs capitalised during the period; and
 - (b) the capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation.

Impairment of Assets (Ind AS 36)

1.7

The objective of this Standard is to prescribe the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. An asset is carried at more than its recoverable amount if its carrying amount exceeds the amount to be recovered through use or sale of the asset. If this is the case, the asset is described as impaired and the Standard requires the entity to recognise an impairment loss. The Standard also specifies when an entity should reverse an impairment loss and prescribes disclosures.

1. Impairment of assets is recognized as per Ind AS 36 for assets including PPE, Intangible assets and good will but excluding:

- (a) inventories
- (b) assets arising from construction contracts (Ind AS 11) and Revenue (Ind AS 18)
- (c) deferred tax assets
- (d) assets arising from employee benefits (Ind AS 19)
- (e) Financial assets (Ind AS 109)
- (f) biological assets (Ind AS 41)
- (g) non-current assets classified as held for sale (Ind AS 105)

When is impairment of asset recognized ?

An asset is impaired when the carrying amount of the asset exceeds its recoverable amount. Recoverable amount is the higher of the fair value less cost to sell and value in use.

Illustration 10

- (a) A Ltd. Has a machine whose original cost was ₹ 45,000. The accumulated depreciation on the machine is ₹ 15,000. Similar machine has recently been sold in the same locality at ₹ 25,000 with selling expenses ₹ 2,000. Management determined the entity specific present value of future cash flows of the machine as ₹ 28,000. Find
 - (b) Fair value less cost to sell
 - (c) Recoverable amount
 - (d) Impairment loss
 - (e) Carrying amount of the machine after impairment.

Solution:

- (a) Fair value less cost to sell = ₹ 25,000 – ₹ 2,000 = ₹ 23,000
- (b) Recoverable amount is the higher of the fair value less cost to sell and value in use i.e. higher of ₹ 23,000 and ₹ 28,000 i.e. ₹ 28,000

- (c) Impairment loss is the carrying amount before impairment less the recoverable amount = ₹ (45,000 – 15,000) – ₹ 28,000 = ₹ 2,000
- (d) Carrying and after impairment = ₹ 30,000 – ₹ 2,000 = ₹ 28,000 (equal to recoverable amt.)

If the machine were revalued and there remains any revaluation profit accumulated balance as OCI under other equity, that should be used first and then profit and loss a/c will be used to close the impairment loss a/c.

2. Special issues about impairment of assets:

- (a) The Ind AS 36 : Impairment of assets prescribes the procedure to ensure that its assets are carried at no more than their recoverable amount.
- (b) Recoverable amounting determined for an individual asset. If the asset does not generate cash inflows that are largely independent of those from other assets the recoverable amount is determined for cash generating unit to which the asset belongs.
- (c) A cash generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of cash in flows from other assets or group of assets.
- (d) The recoverable amount of an asset or a Cash Generating Unit (CGU) is measured whenever there is an indication that the asset may be impaired.
- (e) At each reporting date an entity assesses whether there is any indication that an asset (or) CGU) may be impaired.
- (f) The recoverable amount of the following assets we measured annually.
 - (i) An intangible asset with an indefinite useful life.
 - (ii) An intangible asset not yet available for use
 - (iii) Goodwill
- (g) The recoverable amount of an asset or a cash generating unit is the higher of its fair value less costs to sell and its value in use.
- (h) An impairment loss is the excess of the carrying amount over the recoverable amount and it is recognized in P & L a/c immediately, unless the asset is carried at revalued amount in which case any impairment loss of a revalued asset should be treated as a revaluation decrease to the extent of the carrying amount revaluation profit.
- (i) After the recognition of an impairment loss, depreciation (or amortization) change for the asset will be calculated based on the revised carrying amount and its remaining useful life.
- (j) When impairment loss is computed for a cash generating unit, it should be allocated to reduce the carrying amount of the assets of the CGU in the following order.

First, to goodwill (to the extent of the carrying amount of goodwill).

Then to all other assets of the unit in pro-rata basis on the carrying amount of the assets of the unit. Thus impairment loss in always shown as deduction from individual assets even when it is measured on the CGU.

In case of assets of a CGU, for allocation of the impairment loss the revised carrying amount of the assets should not be reduced below the highest of the following

- (i) its net selling price
- (ii) its value in use
- (iii) zero

If the allocation of impairment loss cannot be made fully, the unallocated part shall again be re- allocated to other assets pro-rata.

- (k) Reversal of impairment loss: If the recoverable amount subsequently increases, the previously recognized impairment loss shall be reversed not exceeding the carrying amount without any impairment.
- (l) In case of reversal of impairment loss of CGU, first, assets other than goodwill shall be written up on pro-rata on carrying amount and then, goodwill will be written up.

Illustration 11

An entity has the following assets with relevant data on the reporting data : (₹ in Lakhs)

Assets	Carrying Amount	Fair value less cost to sell	Value-in-use
A	280	300	250
B	460	400	390
C	220	240	270
D	180	150	170
E	100	80	—

Assets C and D were revalued before. The carrying amounts of revaluation surplus are ₹ 40 Lakhs and ₹ 30 Lakhs respectively. Asset E falls in the cash generating unit consisting of goodwill ₹ 50 Lakhs and intangible asset 90. The fair value less cost to sell of the CGU is ₹ 180 Lakhs and value-in-use is ₹ 170 Lakhs.

Determine impairment loss and revised carrying amount of all the assets stated above. Show the accounting treatment.

Solution:

(₹ in Lakhs)

Asset	Recoverable Amount	Impairment Loss	Revised Carrying Amount
A	300	—	280
B	400	60	400
C	270	—	220
D	170	10 β	170
CGU	180	60	180
Goodwill		50@	NIL
Intangible asset		4.47	85.26
E		5.26	94.74

Working Note:

CGU consist of :	(₹ in lakhs)
Goodwill	50
In-Tangible	90
Asset E	100
Carrying Amount	240
Recoverable Amount	180

Difference in Impairment Loss is ₹ 60,00,000.

∴ Impairment loss is charged to P & L a/c except β.

@ : First goodwill is reduced by the impairment loss of the CGU. & : Next other assets are reduced impairment loss CGU pro-rata.

β : Impairment Loss is charged against revaluation surplus.

Illustration 12

An entity has a machinery on 01.04.2017 with carrying amount of ₹ 28,00,000 after annual depreciation of ₹ 3,00,000 with remaining useful life of 9 years and residual value of ₹ 1,00,000. Depreciation is charged on straight line method. In 31.03.2018 the machine is revalued at ₹ 29,00,000. On 31.03.2020 the machine has fair value less cost to sell ₹ 20,00,000 and value in use ₹ 21,00,000. Show how the transactions would be reflected in the financial statements of the entity as on 31.03.18, 31.03.19, 31.03.20 and 31.03.21.

Solution:

Working Note 1:

Particulars	(₹)
Carrying Amount on 01.04.2017	28,00,000
Less: Depreciation during 2017-18	3,00,000
	25,00,000
Add: Revaluation Profit (₹29,00,000 – ₹25,00,000)	4,00,000
Carrying out on 31-03-2018	29,00,000
Less Depreciation during 2019-2020 = (₹29,00,000 – ₹1,00,000)/8	3,50,000
Carrying and on 31-03-19	25,50,000
Less Depreciation during 2020-2021	3,50,000
Carrying out on 31-03-20	22,00,000
Less Impairment loss (Carrying amt less recoverable amount.# = 2200000 - 2100000)	1,00,000
Carrying amt on 31.03.2020	21,00,000
Less Depreciation during 2020-2021 = (₹21,00,000 – ₹1,00,000)/6	3,33,333
Carrying Amount on 31.3.21	17,66,667

#(Recoverable amount is higher of fair value less cost to sell ₹ 20,00,000 and Value-in-use ₹ 21,00,000)

* : Higher of the fair value less cost to sell and value-in-use

: Carrying Amount — Recoverable amount when carrying amount > Recoverable amount otherwise NIL.

\$: Carrying Amount — Impairment loss.

(Amount in ₹)

Statement of Profit & Loss:	31.03.18	31.03.19	31.03.20	31.03.21
Depreciation	(-) 3,00,000	(-) 3,50,000	(-) 3,50,000	(-) 3,33,333
Other comprehensive Income:				
Revaluation Profit	+ 4,00,000			
For Annual realization of revaluation Profit through depreciation transfer from Revaluation profit to retained earnings [Note 2]				
Revaluation Profit (OCI)		(-) 50,000	(-) 50,000	(-) 33,333
P & L		+ 50,000	+ 50,000	+ 33,333
Impairment loss charged against revaluation profits			(-) 1,00,000	

(Amount in ₹)

Balance Sheet:	31.03.18	31.03.19	31.03.20	31.03.21
PPE – Machinery	29,00,000	25,50,000	21,00,000	17,66,667
Revaluation Profit under Other equity [Note 3]	4,00,000	3,50,000	2,00,000	1,66,667

Note 2 : Revaluation profit subsequent transfer to P & L 31-03-19	4,00,000 ÷ 8 = ₹50,000
31-03-20	4,00,000 ÷ 8 = ₹50,000
31-03-21	2,00,000 ÷ 6 = ₹33,333

Note 3: Revaluation Profit under Other equity

(Amount in ₹)

Particulars	(₹)
Revaluation profit (OCI) under other equity carrying amount on 31.03.18	4,00,000
Transfer to Retained Earnings (P & L) for 2018-2019	(50,000)
For 2019-2020	(50,000)
	3,00,000
Less Impairment loss on 31.03.20	1,00,000
Carrying amount on 31.03.20	2,00,000
Less Transfer to P & L	33,333
Carrying amount on 31.03.20	1,66,667

Intangible Assets (Ind AS 38)

1.8

The objective of this Standard is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another Standard. This Standard requires an entity to recognise an intangible asset if, and only if, specified criteria are met. The Standard also specifies how to measure the carrying amount of intangible assets and requires specified disclosures about intangible assets.

An intangible asset is an identifiable non-monetary asset without physical substance. It excludes

(i) financial assets (ii) the recognition and measurement of exploration and evaluation assets (Ind AS 106), (iii) expenditure on the development and extraction of minerals, oil, natural gas and similar non-regenerative resources; and (iv) intangible assets that are within scope of another standard — for example.

- (a) Ind AS 2 : Inventory
- (b) Ind AS 12 : Income Taxes
- (c) Ind AS 116 : Leases
- (d) Ind AS 19 : Employee Benefits
- (e) Financial assets (Ind AS 32, Ind AS 107, Ind AS 109)
- (f) Ind As 103 : Business combination
- (g) Ind AS 104 : Insurance contracts
- (h) Ind AS 105 : Non-current Assets held for sale and discontinued operations.
- (i) Ind As 115 : Revenue from contracts with customers.

Only in limited cases goodwill can be recognized as intangible asset; otherwise Ind AS 38 is mostly inapplicable to good will because (a) Internally generated goodwill is not recognized as intangible asset and (b) goodwill acquired in business combination is excluded.

An intangible asset is initially recognized at cost if all of the following criteria are met:

- (a) the asset is identifiable and controlled by the entity,
- (b) future economic benefits will flow to the entity,
- (c) cost can be measured reliably.

Intangible assets may be purchased or acquired through business combination or generated internally.

However Internally generated goodwill, brands, mastheads, publishing titles, customer lists and similar items are not recognized as intangible assets they are all expensed. Research expenditure are also recognized as expense. Development expenditure are conditionally recognized as intangible asset — the necessary conditions to be satisfied are —

- (i) technical feasibility
- (ii) intention and ability to complete the intangible asset and to use or sell it.
- (iii) ability to measure the expenditure
- (iv) technical, financial and other resource to complete it and to use or sell it.
- (v) ability to generate future economic benefits: the subsequent expenditure on an intangible asset shall be added to the cost of intangible asset only if :
 - (a) there is increase in future economic benefits
 - (b) expenditure can be measured and attributed to the asset reliably.

Subsequent Measurement:

- (a) The intangible asset will be carried at cost less accumulated amortization and impairment losses . This is the cost model. Amortization is the systematic allocation of the depreciable amount of an intangible asset over its useful life.

Intangible asset may be carried at a revalued amount (fair value). And subsequently carried at revalued amount less post revaluation amortization and impairment losses.

However revaluation can be made only if there exists an active market for the asset.

Amortization is done only if the intangible asset has finite useful life. There is no amortization of intangible assets with indefinite useful life. In such case annually it should be tested for impairment.

Case 1:

After acquiring control of the subsidiary company, the draft of consolidated balance sheet of parent included the following intangible assets which did not appear in the draft individual balance sheet of the subsidiary :

- (i) Customers list
- (ii) Publishing titles

One view is that as the items were not recognized by the subsidiary company it should not be recognized by the parent also. Do you agree to this view ?

Solution:

The intangible assets may be internally generated (or not fulfill up the conditions of being recognized as intangible asset) and hence they were not recognized as intangible asset by the subsidiary company.

But under Ind AS 103 such intangible assets are identifiable and arising based on contractual right and recognized at fair value in the consolidated balance sheet of parent.

Share Based Payment (Ind AS 102)

1.9

The objective of this Standard is to specify the financial reporting by an entity when it undertakes a share-based payment transaction. In particular, it requires an entity to reflect in its profit or loss and financial position the effects of share-based payment transactions, including expenses associated with transactions in which share options are granted to employees.

1. Transaction:

In a share-based payment transaction the entity

- (a) receives goods or services from the supplier or employee and recognizes it as asset or as expense (when no asset is qualified for recognition), and
- (b) issues equity instruments (called equity-settled transaction) or incurs liability to transfer cash or other asset based on the value of the equity instruments of the entity or another group entity (cash-settled) to settle the transaction, or
- (c) neither issues equity instruments nor incurs liability as parent or any other entity in the group settles the transaction (it is also called equity-settled).

Equity instruments include shares and share options and warrants.

2. Types of transactions and recognition:

Three types: (a) Equity-settled (b) Cash-settled and (c) Settlement by choice.

- (a) For the equity-settled transactions, the entity measures the goods or services received, and the corresponding increase in equity, directly, at the Fair Value (FV) of the goods or services received (at the measurement date). If the entity cannot estimate reliably the FV of the goods or services received, measure their value, and the corresponding increase in equity, indirectly, by reference to the FV of the equity instruments granted (at the grant date).

For transactions with employees and others providing similar services, the entity shall measure the fair value of the services received by reference to the fair value of the equity instruments granted, because typically it is not possible to estimate reliably the fair value of the services received. If the equity instruments granted vest immediately, on grant date the entity shall recognize the services received in full, with a corresponding increase in equity. If the equity instruments granted do not vest until the counterparty completes a specified period of service, the entity shall presume that the services to be rendered by the counterparty as consideration for those equity instruments will be received in the future, during the vesting period recognized in proportion of the period expired to the total vesting period.

Subsequent to grant date market value of equity instruments are not relevant in equity-settled transactions (except in rare cases where fair value of grant date cannot be reliably measured).

The **entity in a group** receiving the goods and services shall measure them as equity settled if it has no obligation to settle (issue of equity or incurring liability for cash arises to other entity in the group). The

entity in a group settling the transaction shall recognize the transaction as equity settled if it is settled by issue of its own shares and as cash-settled otherwise.

- (b) For the cash-settled transactions, the entity measures the goods or services acquired and the liability incurred at the fair value of the liability. Until the liability is settled, the entity shall **re-measure the fair value** of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognized in profit or loss for the period.
- (c) Where the terms of the arrangement provide the entity or the counter party with the **choice** of whether the entity settles the transaction in cash (or other assets) or by issuing equity instruments, the entity shall account for that transaction as a **cash-settled** share-based payment transaction if, and to the extent that, the entity has incurred a liability to settle in cash or other assets, or as an **equity-settled** share-based payment transaction if, and to the extent that, no such liability has been incurred.

3. Hypothetical Cases:

After a brief theoretical introduction to the standard on share-based payment transaction some hypothetical cases (simple) on the subject are discussed in the following section.

Illustration 13

- a. D Ltd. offers shares to its employees as bonus for meeting a target. Is it a share based payment transaction? Is it equity settled or cash settled?

Solution:

It is share-based payment transaction. It is equity settled share based payment transaction as D issues its own shares against receiving of services from the employees.

- b. Mr. Z is granted share options conditional upon completing 2 years' service. How is the transaction recognised?

Solution:

The transaction will be recognized as equity-settled share based payment transaction. The services from the employee will be assumed to be rendered in future during the vesting period. In each financial statements falling in the vesting period the fair value of the share options as on the grant date will be recognized in proportion of the period expired to the total vesting period.

- c. Mr. X is an employee of P Ltd. and also holder of equity shares of P. P makes a right issue on equity and X receives his right. Is it a share-based payment transaction?

Solution:

No. For the purpose of this standard, a transaction with an employee or other party in his/her capacity as a holder of equity instruments of the entity is not a share-based payment transaction.

- d. D Ltd. grants 10 share appreciation rights to Q, an employee, entitling him to receive cash payment for the increase in quoted price of D's shares from the exercise price of ₹500 per share after 3 years. How the transaction should be recognized if it is assumed for i) for his past service, ii) for his service in future 3 years?

Solution:

The transaction should be recognized as cash-settled share based payment transaction. a) For past service, the entity shall recognize immediately the services received and a liability to pay for them at fair value of the rights on the grant date. b) For future service transaction will be recognized in the financial statements at fair value of the rights on the grant date proportionate to the period expired to total vesting period.

- e. What amount of expenses will be recognized in each year?

- (i) Z Ltd. grants 100 share options to each of its 400 employees conditional on their continuing in service for 3 years. Fair value of share option on the grant date is ₹ 30.

Calculation of Remuneration expense and Cumulative remuneration expense for 3 years

Year	Calculation	Cumulative remuneration expense (₹)	Remuneration expense recognized in each year (₹)
1	$400 \times 100 \times 30 \times 1/3$	4,00,000	4,00,000
2	$400 \times 100 \times 30 \times 2/3$	8,00,000	4,00,000
3	$400 \times 100 \times 30 \times 3/3$	12,00,000	4,00,000

- (ii) Z Ltd. estimates that 20 per cent of employees will leave during the three-year period and therefore forfeit their rights to the share options.

Year	Calculation	Cumulative remuneration expense (₹)	Remuneration expense recognized in each year (₹)
1	$400 \times 100 \times 30 \times 80\% \times 1/3$	3,20,000	3,20,000
2	$400 \times 100 \times 30 \times 80\% \times 2/3$	6,40,000	3,20,000
3	$400 \times 100 \times 30 \times 80\% \times 3/3$	9,60,000	3,20,000

- f. A company agrees to pay ₹ 10,000 in cash to an employee at the end of year 2 if in this two years the company's earnings increases by average 10% pa. Does this agreement attracts Ind AS 102?

Solution:

No, the payment is not based on value of any equity instruments.

- g. A company agrees to pay an employee ₹ 10,000 by grant of 50 equity shares of ₹ 10 each at grant date fair value of ₹ 200 per share to be vested at the end of 2 year service of the employee if in this two years the company's earnings increases by average 10% pa. However at the end of year 2 the market price of equity share stands at ₹ 220. Does this agreement attracts Ind AS 102 and at what value the transaction will be recognised?

Solution:

It is equity-settled share based payment transaction under Ind AS 102. The transaction will be recognised at the grant date fair value of ₹ 10000 (50*200) and the market price of ₹ 220 when the shares are vested is not recognised.

- h. An entity purchased goods and issued 500 ₹ 10 shares at a market price of ₹ 25.

Solution:

Particulars		Dr.	Cr.
		(₹)	(₹)
Purchase A/c	Dr.	12,500	
To, Equity A/c			12,500

- i. An entity purchased a machine (market price ₹60,000) and granted 1000 equity shares of ₹ 10.

Solution:

Particulars		Dr. (₹)	Cr. (₹)
Machinery A/c	Dr.	60,000	
To, Equity A/c			60,000

- j. An entity purchased a machine (market price ₹ 60,000) and another entity in the group (parent or subsidiary or subsidiary of parent) granted 1000 equity shares of ₹ 10.
- k. Another entity in the group (parent or subsidiary or subsidiary of parent) granted 1000 equity shares of ₹ 10 to the employee of an entity .

Solution:

Particulars		Dr. (₹)	Cr. (₹)
Employee Expense A/c	Dr.	60,000	
To, Equity A/c			60,000

4. Some important terms in share based payment (SBP) transactions are stated below.

- ⊙ The day a share based payment plan is announced and accepted by the counterparty is called grant date.
- ⊙ Vest means to become an entitlement.
- ⊙ The day the employee (or the other supplier of goods and services) becomes entitled to such payments is called vesting date.
- ⊙ The period between grant date and vesting date is called vesting period.
- ⊙ Vesting Conditions are the conditions that have to be fulfilled for vesting.
- ⊙ Vesting conditions are the conditions that determine whether the entity receives the services that entitle the counterparty to receive cash, other assets or equity instruments of the entity under a share-based payment arrangement.
- ⊙ The vesting condition may be a service condition or a performance condition.
- ⊙ If the condition requires completing a specified period of service only, it is a service condition;
- ⊙ Otherwise it is a performance condition.
- ⊙ When a performance condition is related to the market price of equity instruments it is a market condition.
- ⊙ When the performance is not related to market price of equity instruments it is non- market performance condition such as meeting the target sales or profits or any other activity of the entity.
- ⊙ On the other hand if the condition is not related to services for which counterparty is entitled to share based payment, it is a non-vesting condition.
- ⊙ In equity-settled transactions the fair value of equity instruments is estimated with reference to the grant date. In cash-settled transactions the fair value of consideration (based on equity instruments) is recognised at the recognition date. The Expense and Equity (for equity settled)/Liability (for cash settled) will be recognized in each.

5. Thus, based on different types of vesting conditions, share based payment transactions with employees are divided into four categories:

Table 1. Whether vesting condition requires only specified period of service?

YES It is service condition (SC)	NO It is performance condition (PC)	
	Is the performance is related to market price of equity instruments?	
	YES Market condition (MC)	NO (NMC) Non-market performance condition

SC: Vesting period is fixed as agreed and cannot be revised.

PC: It will be either MC or NMC

MC: Vesting period cannot be revised

NMC: Vesting period can be revised

The practical problems are again complicated with the revision of estimate and actual during the vesting period.

Table 2.

	Problems on	
Revision of	Vesting Period (T)	Other than vesting period
		No. of employees (N) Performance (P)

6. Accounting for share-based payment transactions:

Before Ind AS, for the traditional cases of issuing shares to the employees in exchange of their service Guidance Note of the ICAI was followed.

Now, Ind AS 102 provides standard for all types of share-based payment transactions for goods and service received from suppliers and employees.

When the payment is recognised immediately at the grant date: For equity-settled transaction:

Asset/Expense Dr. and Equity Cr. For cash-settled transaction:

Asset/Expense Dr. and Cash/ Other Asset Cr.

When payment is recognised during the vesting period

For equity settled transactions the accounting shall be made as follows:

- Annually during the vesting period:

		Dr.	Cr.
Particulars		(₹)	(₹)
Expense/ Asset A/c	Dr.	xxxx	
	To, Share Based Payment Reserve (Other Equity) A/c		xxxx

- When shares are actually issued:

		Dr.	Cr.
Particulars		(₹)	(₹)
Share based payment reserve (Other Equity) A/c	Dr.	xxxx	
	To, Equity Share Capital A/c		xxxx
	To, Other Equity (Security Premium) A/c		xxxx

For cash settled transactions the accounting shall be made as follows:

- Annually during the vesting period:

		Dr.	Cr.
Particulars		(₹)	(₹)
Expense/ Asset A/c	Dr.	xxxx	
	To, Share Based Payment Liability A/c		xxxx

- When liability is paid:

		Dr.	Cr.
Particulars		(₹)	(₹)
Share Based Payment Liability A/c	Dr.	xxxx	
	To, Cash/Other Asset A/c		xxxx

Illustration 14 (Equity settled) based on Service condition (SC) and revision in number of employees (N)

Z Ltd. grants 100 share options to each of its 400 employees conditional on their continuing in service for 3 years. Fair value of share option on the grant date is ₹ 30. During year 1, 18 employees leave. The entity revises its estimate of total employee departures over the three- year period from 20 per cent to 16 per cent. During year 2, a further 20 employees leave. The entity revises its estimate of total employee departures over the three-year period from 16 per cent to 13 per cent. During year 3, a further 14 employees leave. All the continuing employees exercised the option to subscribe in the equity shares of ₹ 10 each at ₹ 50 only, when market price stands at ₹ 84. Pass Journal Entries of all the years and show the working.

Solution:

The market price of equity shares subsequent to grant date is considered only when fair value at the grant date is not reliably measurable. Hence, market price ₹ 84 is not considered.

Calculation of Expenses recognized during the vesting period:

Year	Calculation	Cumulative remuneration expense (₹)	Remuneration expense recognized in each year (₹)
1	$400 \times 100 \times 30 \times 84\% \times 1/3$ (Note #)	3,36,000	3,36,000

Year	Calculation	Cumulative remuneration expense (₹)	Remuneration expense recognized in each year (₹)
2	$400 \times 100 \times 30 \times 87\% \times 2/3$ (Note #)	6,96,000	3,60,0002
3	$348 \times 100 \times 30 \times 3/3$ (Note #)	10,44,0004	3,48,0003

Note #: At the end of year 1, 16% is revised estimated departure, balance 84% is taken for calculation, at the end of year 2, 13% is revised estimated departure, balance 87% is taken for calculation and at the end of year 3, 52 is actual departure, and balance 348 is taken for calculation.

During the vesting period:

In the books of Z Ltd.:

Journal		Dr.	Cr.
Particulars		(₹)	(₹)
Year 1	Employee Expenses A/c Dr. To, Share Based Payment Reserve (Other Equity) A/c	3,36,000	3,36,0001
Year 2	Employee Expenses A/c Dr. To, Share Based Payment Reserve (Other Equity) A/c	3,60,000	3,60,0002
Year 3	Employee Expenses A/c Dr. To, Share Based Payment Reserve (Other Equity) A/c	3,48,000	3,48,0003

When shares are actually issued:

Exercise price ₹50; Cash Payment for subscription in shares ₹50. Fair Value of Option granted ₹30. Equity shall be credited by Exercise price plus option value = ₹(50+30) = ₹80; nominal value ₹10 and Security premium ₹ 70; market price ₹ 84 is not recognised.

In the books of Z Ltd.:

Journal		Dr.	Cr.
Particulars		₹ ₹	₹
Bank A/c [348 × 100 × 50]	Dr.	17,40,000	
Share Based Payment Reserve (Other Equity) A/c	Dr.	10,44,0004	
To, Equity Share Capital A/c [348 × 100 × 10]			3,48,000
To, Other Equity (Security Premium) A/c			24,36,000

Now we shall take an illustration where a company grants share appreciation rights (SAR) to employees in consideration of services to be received in future during a 3 years of service.

It is a cash settled share based payment transaction where vesting condition is 3 year service and revision is made in estimate of the number of employees.

Employee expenses are recognized during the vesting period and the liability is measured at fair value at the time of recognition. When the liability is actually settled by payment of cash, the difference between the carrying value of liability and actual payment is adjusted through (profit or loss) employee expense.

Illustration 15 (Type: Cash settled)

PQR Ltd. grants 80 cash share appreciation rights (SARs) to each of its 400 employees, on condition that the employees remain in its employment for the next three years. During year 1, 30 employees leave. The entity estimates that a further 50 will leave during years 2 and 3. During year 2, 40 employees leave and the entity estimates that a further 30 will leave during year 3. During year 3, 40 employees leave. At the end of year 3, all SARs held by the remaining employees vest.

At the end of year 3, 100 employees exercise their SARs, another 120 employees exercise their SARs at the end of year 4 and the remaining employees exercise their SARs at the end of year 5.

The fair value of the SARs at the end of each year in which a liability exists and the intrinsic values of the SARs at the date of exercise (which equal the cash paid out) at the end of years 3, 4 and 5 are shown below.

At the end of Year	Fair Value ₹	Intrinsic Value ₹
1	15	
2	16	
3	18	15
4	21	20
5		24

Pass journal entries and show working notes.

Solution:

a. Basis of Calculation

At the end of Year	[Actual]+Estimated reduction in no. of employees	Expense and liability recognized for revised estimated no. of employees at fair value	SAR exercised by actual no. of employees at intrinsic value	Remaining Employees for which liability is carried forward
1	$[30] + 50 = 80$	320 employees at ₹ 15		
2	$[30 + 40] + 30 = 100$	300 employees at ₹16		
3	$[30 + 40 + 40] = 110$	290 employees at ₹18	100 employees at ₹ 15	190
4			120 employees at ₹ 20	70
5			70 employees at ₹ 24	0

b. Calculation of employee expense and liability

Year	Calculation	Annual Expense ₹	Liability at the end ₹
1	$(400 - 80) \times 80 \times 15 \times 1/3$	1,28,000	1,28,000 _{L1}
2	$(400 - 100) \times 80 \times 16 \times 2/3 - L1$	1,28,000	2,56,000 _{L2}
3	$(400 - 110 - 100) \times 80 \times 18 - L2$	17,600	2,73,600 _{L3}

Year	Calculation		Annual Expense ₹	Liability at the end ₹
	$100 \times 80 \times 15$ [expense recognized and paid]	1,20,000		
			1,37,600	
4	$(190 - 120) \times 80 \times 21 - L3$	-1,56,000		1,17,600 _{L4}
	$120 \times 80 \times 20$	1,92,000		
			36,000	
5	0 – L4	-1,17,600		0
	$70 \times 80 \times 24$	1,34,400		
			16,800	
			4,46,400	

c. Journal Dr. Cr.

	Particulars		(₹)	(₹)
Year 1	Employee Expenses A/c Dr. To, Share Based Payment Liability A/c (Fair value of SAR recognized)		1,28,000	1,28,000
Year 2	Employee Expenses A/c Dr. To, Share Based Payment Liability A/c (Fair Value of SAR recognized and remeasured)		1,28,000	1,28,000
Year 3	Employee Expenses A/c Dr. To, Share Based Payment Liability A/c (Fair Value of SAR recognized and remeasured)		1,37,600	1,37,600
	Share Based Payment Liability A/c Dr. To, Cash A/c (SAR settled for 100 employees)		1,20,000	1,20,000
Year 4	Share Based Payment Liability A/c Dr. Employee Expenses A/c Dr. To, Cash A/c (SAR settled for 120 employees)		1,56,000 36,000	1,92,000
Year 5	Share Based Payment Liability A/c Dr. Employee Expenses A/c Dr. To, Cash A/c (SAR settled for 70 employees)		1,17,600 16,800	1,34,400

Some employee share-based payment arrangements permit the employee to choose whether to receive cash or equity instruments. In this situation, a compound financial instrument has been granted, ie a financial instrument with debt and equity components.

Here is one illustrative problem of share based payment arrangement with compound financial instrument.

Illustration 16 (Type: Compound Instrument)

On condition of completion of 3 years service an employee is granted the right to choose either -

- (i) right to cash payment equal to the value of 3000 shares, or
- (ii) 3600 shares with restriction to hold them for 3 years after vesting. The share price (nominal value ₹ 10) at the grant date is ₹ 60 and after taking the effect of the post-vesting transfer restriction the fair value is estimated at ₹ 54 per share. At the end of the years 1, 2 and 3 the share price is ₹ 64, ₹68 and ₹ 72 respectively.

At the end of year 3, the employee chooses: (a) the cash alternative; (b) the equity alternative. Show the necessary workings and pass the journal entries.

Solution:

A brief discussion of the relevant parts of the standard (Ind AS 102) is made before the solution.

When the fair value of equity alternative at the grant date is greater than the fair value of the cash alternative at the grant date, the excess is measured as the fair value of the equity component of the compound financial instrument.

Both the equity component and liability component will be recognized during the vesting period proportionate to the period expired to the total vesting period. Until the liability is settled, the entity shall re-measure the fair value of the liability at the end of each reporting period.

At the end of the vesting period if the employee chooses cash alternative the liability will be paid by cash. If equity alternative is chosen, the liability will be settled by issue of equity. The equity already recognized during the vesting period for the equity component shall remain within the equity.

Working Note 1: Fair value of equity component:

The fair value of the equity alternative = 3600 shares × ₹ 54 per share = ₹ 1,94,400
 The fair value of the cash alternative = 3000 shares × ₹ 60 per share = ₹ 1,80,000
 The fair value of the equity component = ₹ 1,94,400 – ₹ 1,80,000 = ₹ 14,400

Working Note 2: Expenses, Equity and Liabilities recognized in the years 1, 2, and 3.

Year		Expenses (₹)	Equity (₹)	Liabilities (₹)
1	Liability Component $3000 \times ₹64 \times 1/3$	64,000		64,000
	Equity Component $14,400 \times 1/3$	4,800	4,800	
2	Liability Component $3000 \times ₹68 \times 2/3 - ₹64,000$ = ₹1,36,000 - ₹64,000	72,000		72,000
	Equity Component $₹14,400 \times 1/3$	4,800	4,800	
3	Liability Component $3000 \times ₹72 - ₹1,36,000$ = ₹2,16,000 - ₹1,36,000	80,000		80,000

Year		Expenses (₹)	Equity (₹)	Liabilities (₹)
	Equity component ₹14,400×1/3	4,800	4,800	
Total		2,30,400	14,400	2,16,000

Journal		Dr.	Cr.
Year	Particulars	(₹)	(₹)
1	Employee Expenses A/c Dr. To, Share Based Payment Reserve (Other equity)A/c To, Share Based Payment Liability A/c (recognition of equity option and cash settlement option)	68,800	4,800 64,000
2	Employee Expenses A/c Dr. To, Share Based Payment Reserve (Other equity) A/c To, Share Based Payment Liability A/c (recognition of equity option and cash settlement option)	76,800	4,800 72,000
3	Employee Expenses A/c Dr. To, Share based payment reserve (Other equity) To, Share based payment liability (recognition of equity option and cash settlement option)	84,800	4,800 80,000
3	(a) Cash alternative: Share based payment liability A/c Dr. To Cash A/c (settlement in cash)	2,16,000	2,16,000
	(b) Equity alternative: Share based payment liability A/c Dr. To, Equity Share Capital (₹10 × 3000) A/c To, Security Premium (₹62 × 3000) A/c (settlement in equity)	2,16,000	30,000 1,86,000
	Share based payment Reserve Dr. To, Equity Share Capital (₹10×600) To, Security Premium (balancing figure)	14,400	6,000 8,400

Illustration 17 (Type: Equity settled)

Grant with a non-market performance condition, in which the length of the vesting period varies:

At the beginning of year 1, X Ltd. grants 200 shares each to 400 employees, conditional upon the employees' remaining in employment with the company during the vesting period. The shares will vest at the end of year 1 if the entity's earnings increase by more than 15 percent; at the end of year 2 if the entity's earnings increase by more

than an average of 12 per cent per year over the two-year period; and at the end of year 3 if the entity's earnings increase by more than an average of 10 per cent per year over the three-year period.

The shares have a fair value of ₹40 per share at the start of year 1. No dividends need be considered.

By the end of year 1, the entity's earnings have increased by 13 per cent, and 32 employees left. The entity expects further 30 employees to leave during year 2. By the end of year 2, the entity's earnings have increased by only 11 per cent and 27 employees left during the year. The entity expects a further 25 employees to leave during year 3. By the end of year 3, 22 employees left and the company's earnings increased by (a) 9 percent, (b) 6 percent.

Find the Remuneration expenses to be recognised in each year.

Solution:

The share based payments to be accounted as follows:

Year	Calculation	Cumulative Remuneration Expense (₹)	Remuneration Expense for the Year (₹)
1	$338 \times 200 \times ₹40 \times 1/2$	13,52,000	13,52,000
2	$316 \times 200 \times ₹40 \times 2/3$	16,85,333	3,33,333
3 (a)	$319 \times 200 \times ₹40 \times 3/3$	25,52,000	8,66,667
3 (b)	Not vested	0	-16,85,333

- At the end of year 1 and year 2 shares were not vested as performance condition is not satisfied. But at the end of year 3 (a) the shares were vested as average increase in earnings was $(13+11+9)/3 = 11 > 10$ and (b) the shares were vested as average increase in earnings was $(13+11+6)/3 = 10$ is not greater than 10
- Revised no. of employees at the end of year 1: $400 - 32 - 30 = 338$ Revised no. of employees at the end of year 2: $400 - 32 - 27 - 25 = 316$ Revised no. of employees at the end of year 3: $400 - 32 - 27 - 22 = 319$

(a)

Journal

Particulars	Yr 1 (₹)		Yr 2 (₹)		Yr 3 (₹)	
	Dr. (₹)	Cr. (₹)	Dr. (₹)	Cr. (₹)	Dr. (₹)	Cr. (₹)
Employee Expenses A/c Dr.	13,52,000		3,33,333		8,66,667	
To, Share Based Payment Reserve (Other equity)A/c		13,52,000		3,33,333		8,66,667

Year 3

Dr.

Cr.

Particulars	(₹)	(₹)
Share Based Payment Reserve (Other equity)A/c Dr.	25,52,000	
To, Equity Share Capital A/c (10)		6,38,000
To, Security Premium A/c (40-10)		19,14,000

(b)

Particulars		Yr 1 (₹)		Yr 2 (₹)	
Employee Expenses A/c	Dr.	13,52,000		3,33,333	
To, Share Based Payment Reserve (Other equity)A/c			13,52,000		3,33,333

Year 3		Dr.	Cr.
Particulars		(₹)	(₹)
Share based payment reserve (Other equity)	Dr.	16,85,333	
To, Employee Expenses A/c			16,85,333

Illustration 18

Grant with a performance condition, in which the number of equity instruments varies (Type: Equity settled).

At the beginning of year 1, X Ltd. grants options to 200 employees. The share options will vest at the end of year 3, provided that the employees remain in the entity's employment, and provided that revenues of the company increases by at least at an average of 8 percent per year. If the per cent of increase is 8 percent and above but below 10 per cent per year, each employee will receive 120 share options, if 10 percent and above but below 15 percent each year, each employee will receive 240 share options and if on or above 15 percent, each employee will receive 360 share options. On grant date, X Ltd. estimates that the share options have a fair value of ₹40 per option and also estimates that 16 per cent of employees will leave before the end of year 3.

By the end of year 1, 12 employees have left and the entity still expects that a total of 32 employees will leave by the end of year 3. In year 1, revenue has increased by 12 per cent and the company expects this rate of increase to continue over the next 2 years. By the end of year 2, a further 10 employees have left, bringing the total to 22 to date. The entity now expects only 5 more employees will leave during year 3, and therefore expects a total of 27 employees will have left during the three-year period. Revenue in year 2 increased by 18 per cent, resulting in an average of 15 per cent over the two years. By the end of year 3, a further 8 employees have left. The revenue increased by an average of 16 per cent per year in the three year period.

Find the Remuneration expenses to be recognised in each year.

Solution:

Year	Calculation	Cumulative Remuneration Expense (₹)	Remuneration Expense for the Year (₹)
1	$168 \times 240 \times 40 \times 1/3$	5,37,600	5,37,600
2	$173 \times 360 \times 40 \times 2/3$	16,60,800	11,23,200
3	$170 \times 360 \times 40 \times 3/3$	24,48,000	7,87,200

Illustration 19**Grant with a performance condition, in which the exercise price varies (Type: Equity settled, NMCP).**

At the beginning of year 1, an entity grants to a senior executive 10,000 share options, conditional upon the executive's remaining in the entity's employment until the end of year 3. The exercise price is ₹40. However, the exercise price drops to ₹30 if the entity's earnings increase by at least an average of 10 per cent per year over the three-year period.

On grant date, the entity estimates that the fair value of the share options, with an exercise price of ₹30, is ₹16 per option. If the exercise price is ₹40, the entity estimates that the share options have a fair value of ₹12 per option. During year 1, the entity's earnings increased by 12 per cent, and the entity expects that earnings will continue to increase at this rate over the next two years. The entity therefore expects that the earnings target will be achieved, and hence the share options will have an exercise price of ₹30. During year 2, the entity's earnings increased by 13 per cent, and the entity continues to expect that the earnings target will be achieved. During year 3, the entity's earnings increased by only 3 per cent, and therefore the earnings target was not achieved. The executive completes three years' service, and therefore satisfies the service condition. Because the earnings target was not achieved, the 10,000 vested share options have an exercise price of ₹40.

Find the Remuneration expenses to be recognised in each year.

Solution:

The exercise price varies depending on the outcome of a performance condition that is not a market condition, the effect of that performance condition (i.e. the possibility that the exercise price might be ₹40 and the possibility that the exercise price might be ₹30) is not taken into account when estimating the fair value of the share options at grant date. Instead, the entity estimates the fair value of the share options at grant date under each scenario (ie exercise price of ₹40 and exercise price of ₹30) and ultimately revises the transaction amount to reflect the outcome of that performance condition, as illustrated below.

Year	Calculation	Cumulative Remuneration Expense (₹)	Remuneration Expense for the Year (₹)
1	10,000 options × ₹16 × 1/3	53,333	53,333
2	10,000 options × ₹16 × 2/3	1,06,667	53,334
3	10,000 options × ₹12 × 3/3	1,20,000	13,333

Illustration 20 (Type: Equity settled) For grants of equity instruments with market conditions.

At the beginning of year 1, an entity grants to a senior executive 10,000 share options, conditional upon the executive remaining in the entity's employment until the end of year 3. However, the share options cannot be exercised unless the share price has increased from ₹50 at the beginning of year 1 to above ₹65. If the share price is above ₹65 the share options can be exercised at any time till the end of year 10. The entity applies a binomial option pricing model, which takes into account the possibility that the share price will exceed ₹65 (and hence the share options become exercisable) and the possibility that the share price will not exceed ₹65 (and hence the options will be forfeited). It estimates the fair value of the share options with this market condition to be ₹24 per option.

Find the Remuneration expenses to be recognised in each year.

Solution:

The entity expects the executive to complete the three-year service period, and the executive does so, the entity recognises the following amounts in years 1, 2 and 3:

Year	Calculation	Cumulative Remuneration Expense (₹)	Remuneration expense for the year (₹)
1	10,000 options × ₹24 × 1/3	80000	80000
2	10,000 options × ₹24 × 2/3	160000	80000
3	10,000 options × ₹24 × 3/3	240000	80000

Operating Segments (Ind AS 108)

1.10

Many enterprises provide groups of products and services or operate in geographical areas that are subject to differing rates of profitability, opportunities for growth, future prospects, and risks. Information about different types of products and services of an enterprise and its operations in different geographical areas - often called segment information - is relevant to assessing the risks and returns of a diversified or multi-locational enterprise but may not be determinable from the aggregated data. Therefore, reporting of segment information is widely regarded as necessary for meeting the needs of users of financial statements.

- **Objective of the Standard**

The objective of this Standard is to establish principles for reporting financial information, about the different segments. Such information helps users of financial statements:

- (a) better understand the performance of the enterprise;
- (b) better assess the risks and returns of the enterprise; and
- (c) make more informed judgements about the enterprise as a whole

- **Scope of the Standard**

This Accounting Standard shall apply to companies to which Indian Accounting Standards (Ind ASs) notified under the Companies Act apply.

- **Core Principle of the Standard**

An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates. Accordingly, it shall report specified information about its operating segments.

- **Meaning of Operating Segments**

An operating segment is a component of an entity:

- (a) that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity);
- (b) whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance; and
- (c) for which discrete financial information is available.

An operating segment may engage in business activities for which it has yet to earn revenues, for example, start-up operations may be operating segments before earning revenues.

Not every part of an entity is necessarily an operating segment or part of an operating segment. For example, a corporate headquarters or some functional departments may not earn revenues or may earn revenues that are only incidental to the activities of the entity and would not be operating segments.

- **Reportable Segments**

An entity shall report separately information about each operating segment that:

- (a) has been identified in accordance with the meaning stated in the previous section (Ref: Meaning of Operating Segments) or results from aggregating two or more of those segments as mentioned in the aggregation criteria, and
- (b) exceeds the quantitative thresholds.

- **Aggregation Criteria**

Operating segments often exhibit similar long-term financial performance if they have similar economic characteristics. For example, similar long-term average gross margins for two operating segments would be expected if their economic characteristics were similar. Two or more operating segments may be aggregated into a single operating segment if aggregation is consistent with the core principle of this Ind AS, the segments have similar economic characteristics, and the segments are similar in each of the following respects:

- (a) the nature of the products and services;
- (b) the nature of the production processes;
- (c) the type or class of customer for their products and services.
- (d) the methods used to distribute their products or provide their services; and
- (e) if applicable, the nature of the regulatory environment, for example, banking, insurance or public utilities.

- **Quantitative Threshold**

An entity shall report separately information about an operating segment that meets any of the following quantitative thresholds:

- (a) Its reported revenue, including both sales to external customers and intersegment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments.
- (b) The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.
- (c) Its assets are 10 per cent or more of the combined assets of all operating segments.

Operating segments that do not meet any of the quantitative thresholds may be considered reportable, and separately disclosed, if management believes that information about the segment would be useful to users of the financial statements.

An entity may combine information about operating segments that do not meet the quantitative thresholds with information about other operating segments that do not meet the quantitative thresholds to produce a reportable segment only if the operating segments have similar economic characteristics and share a majority of the aggregation criteria.

If management judges that an operating segment identified as a reportable segment in the immediately preceding period is of continuing significance, information about that segment shall continue to be reported separately in the current period even if it no longer meets the criteria for reportability.

If an operating segment is identified as a reportable segment in the current period in accordance with the quantitative thresholds, segment data for a prior period presented for comparative purposes shall be restated to reflect the newly reportable segment as a separate segment, even if that segment did not satisfy the criteria for reportability in the prior period, unless the necessary information is not available and the cost to develop it would be excessive.

However, there may be a practical limit to the number of reportable segments that an entity separately discloses beyond which segment information may become too detailed. Hence, as the number of segments that are reportable increases above ten, the entity should consider whether a practical limit has been reached.

Illustration 21

An enterprise operates through eight segments, namely, A, B, C, D, E, F, G and H. The relevant information about these segments is given in the following table (amounts in ₹'000)

Particulars	A	B	C	D	E	F	G	H	Total (Segment)
1. Segment Revenue									
(a) External Sales	-	663	37	25	13	125	50	87	1000
Inter Segment Sales	250	150	75	13	-	-	12	-	500
2. Segment Results Profit/ (Loss)	15	(270)	45	(15)	24	(15)	15	21	
3. Segment Assets	15	5	5	60	3	5	5	2	100

Identify the reportable segments as per Ind AS 108.

Solution:

(₹ in '000)

(a) Segment Revenue Criterion:

Threshold = 10% of total revenue = 10% of (1,000 + 500) = ₹150

Reportable Segments are A and B.

(b) Result Criterion:

Threshold = 10% of total profit (₹120) or total loss (₹ 300) – higher of the two = ₹30

Reportable Segments are B and C.

(c) Asset Criterion:

Threshold = 10% of total assets = 10% of 100 = ₹10

Reportable Segments are A and D.

Total external revenue of A, B, C and D = Nil + 663 + 37 + 25 = ₹725 which is lower than 75% of total external revenue of ₹1000 (i.e., ₹750).

No additional segment has been identified by the management as per their discretion.

It is assumed that the company will select segment F to meet the 75% threshold criteria.

Hence the reportable segments are A, B, C, D and F.

- **Disclosure:**

An entity shall disclose the following for each period for which a statement of profit and loss is presented:

- (a) General information;
- (b) Information about reported segment profit or loss, including specified revenues and expenses included in reported segment profit or loss, segment assets, segment liabilities and the basis of measurement; and
- (c) Reconciliations of the totals of segment revenues, reported segment profit or loss, segment assets, segment liabilities and other material segment items to corresponding entity amounts. Reconciliations of the amounts in the balance sheet for reportable segments to the amounts in the entity's balance sheet are required for each date at which a balance sheet is presented. Information for prior periods shall be restated.

I. General Information: An entity shall disclose the following general information:

- (a) factors used to identify the entity's reportable segments;
- (b) the judgements made by management in applying the aggregation criteria; and
- (c) types of products and services from which each reportable segment derives its revenues.

II. Information about profit or loss, assets and liabilities: An entity shall report a measure of profit or loss for each reportable segment. An entity shall report a measure of total assets and liabilities for each reportable segment if such amounts are regularly provided to the chief operating decision maker. An entity shall also disclose the following:

- (a) Revenues from external customers;
- (b) Revenues from transactions with other operating segments of the same entity;
- (c) Interest revenue (separately from interest expense);
- (d) Interest expense;
- (e) Depreciation and amortisation and other material non-cash items;
- (f) Material items of income and expense
- (g) The entity's interest in the profit or loss of associates and joint ventures accounted for by the equity method;
- (h) Income tax expense or income.

III. Measurement: The amount of each segment item reported shall be the measure reported to the chief operating decision maker for the purposes of making decisions about allocating resources to the segment and assessing its performance.

IV. Reconciliations: An entity shall provide reconciliations of all of the following total of the reportable segments to that of the entity:

- (a) Revenue.
- (b) Profit or loss before tax and discontinued operations.
- (c) Assets
- (d) Liabilities
- (e) Amount for every other material item of information.

V. Entity-wide disclosures: Following information shall be provided by an entity only if it is not provided as part of the reportable segment information (unless the necessary information is not available and the cost to develop it would be excessive):

- (A) Information about products and services:** An entity shall report the revenues from external customers for each product and service, or each group of similar products and services.
- (B) Information about geographical areas:** An entity shall report the following geographical information,
- (a) revenues from external customers
 - (i) attributed to the entity's country of domicile and
 - (ii) attributed to all foreign countries in total (separately if material).
 - (b) non-current assets other than financial instruments, deferred tax assets, post-employment benefit assets, and rights arising under insurance contracts
 - (i) located in the entity's country of domicile and
 - (ii) located in all foreign countries in total in which the entity holds assets. If assets in an individual foreign country are material, those assets shall be disclosed separately.
- (C) Information about major customers:** An entity shall provide information about the extent of its reliance on its major customers. If revenues from transactions with a single external customer amount to 10 per cent or more of an entity's revenues, the entity shall disclose that fact, the total amount of revenues from each such customer, and the identity of the segment or segments reporting the revenues.

Fair Value Measurement (Ind AS 113)

1.11

1. Objectives:

- (a) To define fair value
- (b) To set up a framework for measurement of fair value
- (c) To specify requirements of disclosure of fair value measurement.

2. Scope:

It applies when another Ind AS requires or permits fair value measurements or disclosures about fair value measurements except cases under Ind AS 17, Ind AS 19, and Ind AS 102. It does not apply to values similar to fair value, such as 'net realizable value' in Ind AS 2 or Recoverable amount in Ind AS 36. Thus, which assets or liabilities or equity instruments are subject to measurement at fair value that is beyond the scope of Ind AS 113.

3. Definition:

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

3.1. Fair value is a market-based measurement, not an entity-specific measurement. The use value or entry value to the entity is not relevant; rather the exit value in the market is important. It is the exit price to the holder of asset or bearer of liability. That exit price may be directly observed in the market or it may be estimated from the market information or by using a valuation technique. Fair value in any circumstance remains to be the exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability. Thus, an entity's intention to hold an asset or to settle or otherwise fulfil a liability is not relevant when measuring fair value.

4. Measurement :

4.1 The asset or liability:

- (a) The measurement is affected by the characteristics of assets or liabilities that are relevant for the market participants, such as, (a) the condition and location of the asset; and (b) restrictions, if any, on the sale or use of the asset.
- (b) The asset or liability measured at fair value might be either of the following:
 - (i) a stand-alone asset or liability (eg a financial instrument or a non-financial asset); or
 - (ii) a group of assets, a group of liabilities or a group of assets and liabilities (eg a cash-generating unit or a business).

4.2 The transaction:

- (a) The transaction of exchange of the asset or liability is not an actual but an assumed transaction. It

is required that the transaction must be an orderly transaction (it is not a forced transaction, forced liquidation or distress sale).

- (b) A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either:
 - (i) in the principal market for the asset or liability; or
 - (ii) in the absence of a principal market, in the most advantageous market for the asset or liability.
- (c) In the absence of evidence to the contrary, the market in which the entity would normally enter into a transaction to sell the asset or to transfer the liability is presumed to be the principal market or, in the absence of a principal market, the most advantageous market.
- (d) If there is a principal market for the asset or liability, the fair value measurement shall represent the price in that market (whether that price is directly observable or estimated using another valuation technique), even if the price in a different market is potentially more advantageous at the measurement date.
- (e) The principal (or most advantageous) market (and thus, market participants) shall be considered from the perspective of the entity.

4.3 The market participants are assumed to act in their economic best interest.

4.4 The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall not be adjusted for transaction costs but shall be adjusted for transport costs.

4.5 Application to non-financial assets.

- a) A fair value measurement of a non-financial asset takes into account a market participant's ability to (generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.
- (b) Highest and best use is determined from the perspective of market participants, even if the entity intends a different use. However, an entity's current use of a non-financial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximise the value of the asset.
- (c) If the highest and best use of the asset is to use the asset in combination with other assets or with other assets and liabilities, the fair value of the asset is the price that would be received in a current transaction to sell the asset assuming that the market participant already holds the complementary assets and the associated liabilities.
- (d) If the highest and best use of the asset is to use it on a stand-alone basis, the fair value of the asset is the price that would be received in a current transaction to sell the asset to market participants that would use the asset on a stand-alone basis.

4.6 Application to liabilities and an entity's own equity instruments

- (a) The transfer of a liability or an entity's own equity instrument assumes that
 - (i) A liability would remain outstanding and the market participant transferee would be required to fulfil the obligation. The liability would not be settled with the counterparty or otherwise extinguished on the measurement date.
 - (ii) An entity's own equity instrument would remain outstanding and the market participant transferee would take on the rights and responsibilities associated with the instrument. The instrument would not be cancelled or otherwise extinguished on the measurement date.

4.7 Non-performance risk

The fair value of a liability reflects the effect of non-performance risk. Nonperformance risk includes,

but may not be limited to, an entity's own credit risk (as defined in Ind AS 107, Financial Instruments: Disclosures). Non-performance risk is assumed to be the same before and after the transfer of the liability.

4.8 Fair value at initial recognition:

If another Ind AS requires or permits an entity to measure an asset or a liability initially at fair value and the transaction price differs from fair value, the entity shall recognise the resulting gain or loss in profit or loss unless that Ind AS specifies otherwise.

4.9 Valuation techniques:

- (a) An entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.
- (b) Three widely used valuation techniques are the market approach, the cost approach and the income approach.
 - (i) The market approach uses prices and other relevant information generated by market transactions involving identical or comparable (ie similar) assets, liabilities or a group of assets and liabilities, such as a business.
 - (ii) The cost approach reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost). From the perspective of a market participant seller, the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence.
 - (iii) The income approach converts future amounts (eg cash flows or income and expenses) to a single current (ie discounted) amount. When the income approach is used, the fair value measurement reflects current market expectations about those future amounts. From the perspective of a market participant seller, the current market expectation is the price that would be received for the asset based on the expected income to a market participant buyer from that asset.

4.10 Fair value hierarchy:

This Ind AS establishes a fair value hierarchy that categorises into three levels of the inputs to valuation techniques for measuring fair value.

- (i) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
- (ii) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- (iii) Level 3 inputs are unobservable inputs for the asset or liability.

The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).

5. Disclosure of Fair Value Measurement:

- (a) An entity shall disclose information that helps users of its financial statements assess both of the following:
 - (i) for assets and liabilities that are measured at fair value on a recurring or non-recurring basis in the balance sheet after initial recognition, the valuation techniques and inputs used to develop those measurements.

- (ii) for recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income for the period.
- (b) An entity shall disclose, at a minimum, the following information for each class of assets and liabilities measured at fair value in the balance sheet after initial recognition:
 - (i) for recurring and non-recurring fair value measurements, the fair value measurement at the end of the reporting period, and for non-recurring fair value measurements, the reasons for the measurement.
 - (ii) for recurring and non-recurring fair value measurements, the level of the fair value hierarchy within which the fair value measurements are categorised in their entirety (Level 1, 2 or 3).
 - (iii) for recurring fair value measurement, the detail about the amounts of any transfers between Level 1 and Level 2 of the fair value hierarchy.
 - (iv) for recurring and non-recurring fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, a description of the valuation technique(s) and the inputs used in the fair value measurement.
 - (v) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy, a reconciliation from the opening balances to the closing balances.
 - (vi) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy, the amount of the total gains or losses for the period included in profit or loss that is attributable to the change in unrealised gains or losses relating to those assets and liabilities held at the end of the reporting period, and the line item(s) in profit or loss in which those unrealised gains or losses are recognised.
 - (vii) for recurring and non-recurring fair value measurements categorised within Level 3 of the fair value hierarchy, a description of the valuation processes used by the entity.
- (c) An entity shall present the quantitative disclosures required by this Ind AS in a tabular format unless another format is more appropriate.

Revenue from Contracts with Customers (Ind AS 115)

1.12

The objective of this Standard is to establish the principles that an entity shall apply to report useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer.

1. Introduction

This standard states how to recognize revenue and to measure the amount at which revenue is recognized from contracts with customers.

Revenue is the consideration for satisfying performance obligation undertaken in the contract. Revenue is recognized as and when performance obligation is satisfied and it is measured at the amount of transaction price attributable to the satisfied performance obligation.

In an ordinary contract for sale of goods the performance obligation is satisfied when goods are transferred to the customer and revenue (Sale) is recognized at the (sale value) transaction price.

But there may be complications at different stages in revenue recognition and measurement. The different stages can be enumerated as below :

- I. Identifying the contract.
- II. Identifying performance obligation.
- III. Satisfaction of performance obligation.
- IV. Determination of and allocation of transaction price to performance obligation. While stages I to III are for recognition of revenue stage IV is for its measurement.

The discussion will elaborate each stage with explanatory notes and illustrative examples. Besides other matters of the standard will also be briefly discussed.

Rest of the discussion is arranged in the following sequence. 2. Objectives and scope. 3. Four stages. 4. Contract cost. 5. Presentation and disclosure. 6. Service concession arrangement.

2. Scope

To meet the objective, the core principle of this Standard is that an entity shall recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

An entity shall apply this Standard to all contracts with customers, except the following:

- (a) lease contracts within the scope of Ind AS 116 on Leases;
- (b) insurance contracts within the scope of Ind AS 104 on Insurance Contracts;
- (c) financial instruments and other contractual rights or obligations within the scope of Ind AS 109 Financial Instruments, Ind AS 110 Consolidated Financial Statements, Ind AS 111 Joint Arrangements, Ind AS 27 Separate Financial Statements and Ind AS 28 Investments in Associates and Joint Ventures; and

- (d) non-monetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers. For example, this Standard would not apply to a contract between two oil companies that agree to an exchange of oil to fulfil demand from their customers in different specified locations on a timely basis.

This Standard specifies the accounting for the incremental costs of obtaining a contract with a customer and for the costs incurred to fulfil a contract with a customer if those costs are not within the scope of another Standard. An entity shall apply those paragraphs only to the costs incurred that relate to a contract with a customer (or part of that contract) that is within the scope of this Standard.

An entity shall apply this standard to a contract (other than exception listed above) only if the counterparty to the contract is a customer.

3. Four stages:

Stage I. Identifying the contract –

- 3.1 An entity shall account for a contract with a customer that is within the scope of this Standard only when all of the following criteria are met:
- the parties to the contract have approved the contract (in writing, orally or in accordance with other customary business practices) and are committed to perform their respective obligations;
 - the entity can identify each party's rights regarding the goods or services to be transferred;
 - the entity can identify the payment terms for the goods or services to be transferred;
 - the contract has commercial substance (ie the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract); and
 - it is probable that the entity will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer. In evaluating whether collectability of an amount of consideration is probable, an entity shall consider only the customer's ability and intention to pay that amount of consideration when it is due. The amount of consideration to which the entity will be entitled may be less than the price stated in the contract if the consideration is variable because the entity may offer the customer a price concession.
- 3.2 There does not exist a contract of each party to the contract has the unilateral enforceable right to continue a wholly unperformed contract without compensating the other parties. A contract is wholly unperformed if—
- No transfer of promised goods or services to the customer, and
 - No consideration is received or entitled to receive.
- 3.3 A contract meeting the criteria at inception shall not be reassessed unless significant changes take place. However, a contract failing to meet the criteria shall continue to reassess to determine if the criteria are met subsequently.
- 3.4 When a contract with a customer does not meet the criteria and an entity receives consideration from the customer, the entity shall recognise the consideration received as revenue only when either of the following events has occurred:
- the entity has no remaining obligations to transfer goods or services to the customer and all, or substantially all, of the consideration promised by the customer has been received by the entity and is non-refundable; or
 - the contract has been terminated and the consideration received from the customer is non-refundable.

3.5 The consideration received shall be recognized as liability until any of the criteria is met at the time of the consideration received.

3.6 Combination of contracts:

When there are two or more contracts with same customer (or related party) at or near the same time, they will be combined into a single contract if either—

- (i) Contracts are negotiated as a package with single commercial objective.
- (ii) The consideration of one contract depends on the price of performance of the other, or
- (iii) There is single performance obligation.

Note : Revenue is recognized for performance obligation satisfied under a single contract or multiple contracts combined into a single contract.

3.7 Contract modifications:

An entity shall account for a contract modification as

- A a separate contract (if conditions satisfied)
 - B: termination of the existing contract and creation of a new contract for the remaining performance.
 - C: Continuation of existing contract with modifications.
- A. contract modification is a change in scope or price (or both) of a contract that is approved by the parties to the contract.

The conditions to be satisfied for contract modification A:

- (i) additional performances are distinct.
- (ii) additional consideration is stand-alone selling price.

When condition (ii) is not satisfied but remaining performances are distinct it will be contract modification

- B. The consideration allocable to the remaining performances is the sum total of the unrecognized revenue of the existing contract and the consideration promised for contract modification.

It will be a contract modification C if the remaining performances are not distinct. In such case the total performance obligations (existing and modifications) are related to total transaction price (existing and modification), and allocation of transaction price to performance obligation is revised. The revenue recognized for performance obligations satisfied is adjusted for the revised allocation (cumulative catch-up basis).

In illustrations it may be shown how revenue recognition and amount are changed for different types of contract modifications.

Stage II. Identifying performance obligation.

3.8 Performance obligation is a promise to transfer

- (i) a good or service (or a bundle of goods and services) that is distinct or
- (ii) a series of distinct goods and services (substantially some with same pattern of transfer)

A contract with a customer generally explicitly states the goods or services that an entity promises to transfer to a customer. However, implied promises by the customary business practice, published policies or specific statements are also identified as performance obligation. But some activities other than transfer of good or service, which an entity must undertake to fulfill a contract are not a performance obligation (Jay, various administrative tasks to set up a contract)

- 3.9 Examples of promised goods or services.
- a. Sale of goods produced by an entity. (for example, inventory of a manufacturer)
 - b. Resale of goods purchased by an entity. (for example, merchandise of a retailer)
 - c. Resale of rights to goods or services purchased by an entity.
 - d. Performing contractually agreed-upon tasks for a customer.
 - e. Providing a service of standing ready to provide goods or services (snacks and drinks in hotel room with price tag)
 - f. Agency service for another party to transfer goods or services.
 - g. Granting rights to goods and services to be provided in the future (Free air tickets for purchase of VIP suitcase)
 - h. Contracting, manufacturing or developing an asset on behalf of a customer.
 - i. Granting licenses.
 - j. Granting options to purchase of additional goods or services.
- 3.10 A good or service that is promised to a customer is distinct if both of the following criteria are met:
- (a) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (ie the goods or services is capable of being distinct); and
 - (b) the entity's promise to transfer the goods or services to the customer is separately identifiable from other promises in the contract (ie the goods or services is distinct within the context of the contract).
- 3.11 If a promised goods or services is not distinct, an entity shall combine that goods or services with other promised goods or services until it identifies a bundle of goods or services that is distinct. In some cases, that would result in the entity accounting for all the goods or services promised in a contract as a single performance obligation.

Stage III Satisfaction of performance obligations.

- 3.12 An entity shall recognise revenue when (or as) the entity satisfies a performance obligation by transferring a promised goods or services (ie an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset.
- 3.13 An entity shall determine at contract conception whether it satisfies the performance obligation over time. If not, it is performance obligation satisfied at a point of time.
- 3.14 Goods and services are assets, even if only momentarily, when they are received and used (as in the case of many services). Control of an asset refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset. Control includes the ability to prevent other entities from directing the use of, and obtaining the benefits from, an asset. The benefits of an asset are the potential cash flows (inflows or savings in outflows) that can be obtained directly or indirectly in many ways, such as by:
- (a) using the asset to produce goods or provide services (including public services);
 - (b) using the asset to enhance the value of other assets;
 - (c) using the asset to settle liabilities or reduce expenses;
 - (d) selling or exchanging the asset;
 - (e) pledging the asset to secure a loan; and
 - (f) holding the asset.

Control of an asset refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset. Control includes the ability to prevent other entities from directing the use of, and obtaining the benefits from, an asset.

The benefits of an asset are the potential cash flows (inflows or savings in outflows) that can be obtained directly or indirectly.

An entity transfers control of a goods or services over time and, therefore, satisfies a performance obligation and recognises revenue over time, if one of the following criteria is met:

- (a) the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs;
- (b) the entity's performance creates or enhances an asset (for example, work in progress) that the customer controls as the asset is created or enhanced or
- (c) the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

If a performance obligation is not satisfied over time, an entity satisfies the performance obligation at a point in time.

For each performance obligation satisfied over time, an entity shall recognise revenue over time by measuring the progress towards complete satisfaction of that performance obligation.

Appropriate methods of measuring progress include output methods and input methods.

Output methods recognise revenue on the basis of direct measurements of the value to the customer of the goods or services transferred to date relative to the remaining goods or services promised under the contract.

As a practical expedient, if an entity has a right to consideration from a customer in an amount that corresponds directly with the value to the customer of the entity's performance completed to date (for example, a service contract in which an entity bills a fixed amount for each hour of service provided), the entity may recognise revenue in the amount to which the entity has a right to invoice.

The outputs used under output method to measure progress may not be directly observable and the information required to apply them may not be available to an entity without undue cost. Therefore, an input method may be necessary.

Input methods recognise revenue on the basis of the entity's efforts or inputs to the satisfaction of a performance obligation (for example, resources consumed, labour hours expended, costs incurred, time elapsed or machine hours used) relative to the total expected inputs to the satisfaction of that performance obligation. If the entity's efforts or inputs are expended evenly throughout the performance period, it may be appropriate for the entity to recognise revenue on a straight-line basis.

When a cost incurred is not proportionate to the entity's progress in satisfying the performance obligation. In those circumstances, the best depiction of the entity's performance may be to adjust the input method to recognise revenue only to the extent of that cost incurred.

An entity shall recognise revenue for a performance obligation satisfied over time only if the entity can reasonably measure its progress towards complete satisfaction of the performance obligation.

Stage IV. Determination of and allocation of transaction price to performance obligation.

When (or as) a performance obligation is satisfied, an entity shall recognise as revenue the amount of the transaction price that is allocated to that performance obligation.

Determining the transaction price

An entity shall consider the terms of the contract and its customary business practices to determine the

transaction price. The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both.

The nature, timing and amount of consideration promised by a customer affect the estimate of the transaction price. When determining the transaction price, an entity shall consider the effects of all of the following:

- (a) variable consideration;
 - (b) constraining estimates of variable consideration;
 - (c) the existence of a significant financing component in the contract;
 - (d) non-cash consideration; and
 - (e) consideration payable to a customer.
- (a) If the consideration promised in a contract includes a variable amount, an entity shall estimate the amount of consideration to which the entity will be entitled in exchange for transferring the promised goods or services to a customer.
- (a1) An entity shall estimate an amount of variable consideration by using either of the following methods:
- (i) The expected value—the expected value is the sum of probability-weighted amounts in a range of possible consideration amounts.
 - (ii) The most likely amount—the most likely amount is the single most likely amount in a range of possible consideration amounts (ie the single most likely outcome of the contract). The most likely amount may be an appropriate estimate of the amount of variable consideration if the contract has only two possible outcomes (for example, an entity either achieves a performance bonus or does not).
- (a2) To account for the transfer of products with a right of return (and for some services that are provided subject to a refund), an entity shall recognise all of the following:
- (i) revenue for the transferred products in the amount of consideration to which the entity expects to be entitled (therefore, revenue would not be recognised for the products expected to be returned);
 - (ii) a refund liability; and
 - (iii) an asset (and corresponding adjustment to cost of sales) for its right to recover products from customers on settling the refund liability.
- (b) An entity shall include in the transaction price some or all of an amount of variable consideration estimated only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved.
- (c) If significant financing component exists in the contract whether explicitly or implicitly, that would be separately recognised as interest income.
- (d) To determine the transaction price for contracts in which a customer promises consideration in a form other than cash, an entity shall measure the non-cash consideration (or promise of non-cash consideration) at fair value.
- (e) An entity shall account for consideration payable to a customer, if any, as a reduction of the transaction price.

Allocating the transaction price to performance obligations :

An entity shall allocate the transaction price to each performance obligation identified in the contract

- (A) On a relative stand-alone selling price basis as per the standard,
- (B) Except for
 - (B1) allocating discounts, and
 - (B2) allocating variable consideration
- (A) To allocate the transaction price to each performance obligation on a relative stand-alone selling price basis, an entity shall determine the stand-alone selling price at contract inception of the distinct good or service underlying each performance obligation in the contract and allocate the transaction price in proportion to those stand-alone selling prices.
- (B1) the entity shall allocate a discount proportionately to all performance obligations in the contract except observable evidence exists for the discounts being entirely related to one or more performance obligations.
- (B2) Variable consideration attributable to the entire contract or to a specific part of the contract is allocated accordingly.

An entity shall allocate to the performance obligations in the contract any subsequent changes in the transaction price on the same basis as at contract inception.

In Bill-and-hold transaction, the entity holds the goods as custodian and revenue is recognised. However, for establishing transfer of control, all the following criteria must be met:

- (a) the reason for the bill-and-hold arrangement must be substantive (for example, the customer has requested the arrangement);
- (b) the product must be identified separately as belonging to the customer;
- (c) the product currently must be ready for physical transfer to the customer; and
- (d) the entity cannot have the ability to use the product or to direct it to another customer.

4. Contract costs

Incremental costs of obtaining a contract

- (i) An entity shall recognise as an asset the incremental costs of obtaining a contract with a customer if the entity expects to recover those costs.

The incremental costs of obtaining a contract are those costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, a sales commission).

Costs to fulfil a contract

- (ii) If the costs incurred in fulfilling a contract with a customer are not within the scope of another Standard (for example, Ind AS 2, Inventories, Ind AS 16, Property, Plant and Equipment or Ind AS 38, Intangible Assets), an entity shall recognise an asset from the costs incurred to fulfil a contract only if those costs meet all of the following criteria:
 - (a) the costs relate directly to a contract or to an anticipated contract that the entity can specifically identify (for example, costs relating to services to be provided under renewal of an existing contract or costs of designing an asset to be transferred under a specific contract that has not yet been approved);

- (b) the costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and
- (c) the costs are expected to be recovered.

5. Presentation and disclosure.

- (i) When either party to a contract has performed, an entity shall present the contract in the balance sheet as a contract asset or a contract liability, depending on the relationship between the entity's performance and the customer's payment. An entity shall present any unconditional rights to consideration separately as a receivable.
- (ii) The objective of the disclosure requirements is for an entity to disclose sufficient information to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. To achieve that objective, an entity shall disclose qualitative and quantitative information about all of the following:
 - (a) its contracts with customers;
 - (b) the significant judgements, and changes in the judgements, made in applying this Standard to those contracts; and
 - (c) any assets recognised from the costs to obtain or fulfil a contract with a customer.

6. Service concession arrangement.

- (i) Infrastructure for public services—such as roads, bridges, tunnels, prisons, hospitals, airports, water distribution facilities, energy supply and telecommunication networks— has traditionally been constructed, operated and maintained by the public sector and financed through public budget appropriation.

In recent times, governments have introduced contractual service arrangements to attract private sector participation in the development, financing, operation and maintenance of such infrastructure. The infrastructure may already exist, or may be constructed during the period of the service arrangement.

An arrangement within the scope of the Appendix C of Ind AS 115 typically involves a private sector entity (an operator)

- ⊙ constructing the infrastructure used to provide the public service or
- ⊙ upgrading it (for example, by increasing its capacity) and operating and maintaining that infrastructure for a specified period of time.

The operator is paid for its services over the period of the arrangement.

The arrangement is governed by a contract that sets out performance standards, mechanisms for adjusting prices, and arrangements for arbitrating disputes.

Such an arrangement is often described as a 'build-operate-transfer', a 'rehabilitate-operate-transfer' or a 'public-to-private' service concession arrangement.

- (ii) Infrastructure within the scope of this Appendix shall not be recognised as property, plant and equipment of the operator because the contractual service arrangement does not convey the right to control the use of the public service infrastructure to the operator. The operator has access to operate the infrastructure to provide the public service on behalf of the grantor in accordance with the terms specified in the contract.
- (iii) Under the terms of contractual arrangements within the scope of this Appendix, the operator acts as a service provider. The operator constructs or upgrades infrastructure (construction or upgrade services) used to provide a public service and operates and maintains that infrastructure (operation services) for a specified period of time.

- (iv) The operator shall recognise and measure revenue in accordance with Ind AS 115 for the services it performs. The nature of the consideration (received as a financial asset and as an intangible asset) determines its subsequent accounting treatment. Construction or upgrade services
The operator shall account for construction or upgrade services in accordance with Ind AS 115. The operator shall account for operation services in accordance with Ind AS 115.
- (v) All aspects of a service concession arrangement shall be considered in determining the appropriate disclosures in the notes in accordance with Appendix D of Ind AS 115.

Illustration 22 A

Z Ltd. Agrees to sell 200 units of product A to a customer for ₹3,20,000 (₹1,600 per unit). The product A units are transferred over to the customers from 01.01.2019 to 30.06.2019. On 31.03.2020 after transfer of control of 100 units of A, the contract is modified to deliver additional 50 units at the then market price of ₹1,400 per unit to be delivered in following 3 months. Show how the transaction will be accounted in books of Z ltd.

Solution:

During F.Y. 2019-2020 revenue will be recognized for the performance obligation satisfied in regard the identified contract. Although the contract is modified, the modification is accounted as a distinct separate contract with its stand-alone price.

Thus in regard the original contract the transaction price to be allocated to the satisfied performance obligation is $(100 \times ₹3,20,000) / 200 = ₹ 1,60,000$ to be recognized as revenue to be credited to P & L.

In F.Y. 2019-20, on satisfaction of performance obligation of the original contract the balance ₹ 1,60,000 of the transaction price will be recognized as revenue. Further, for the modifications of the contract, treated as another distinct and new contract the transaction price is $50 \times ₹ 1,400 = ₹ 70,000$ to be recognized as revenue on satisfaction of performance obligation, i.e. on transfer of control of the units in 3 months.

Illustration 22 B

On 1.4.2020 the contract is modified to deliver 150 units of A instead of remaining 100 units by 30.6.2020 at ₹ 1,500 per unit. Here additional performances are distinct but additional consideration is not stand-alone selling price; hence, it is modification B.

Solution:

For FY 18-19 revenue recognition is ₹ 1,60,000 for 100 units at ₹ 1,600 p.u.. For 2020-2021:

Unrecognised revenue of the original contract (as if terminated)	Nil
Contract modification $150 \times ₹1500$	₹ 225,000
Total	₹ 225,000

C: Original contract price of a project was ₹ 50,000 based on estimated 200 production hours at a rate of ₹ 250 per hour. After revenue recognition for 100 hours the contract is modified to increase the required hours by 50 (i) at hourly rate by ₹200; (ii) at hourly rate of ₹ 200 for the remaining hours; (iii)) at hourly rate of ₹ 200 for the total hours required

The remaining performance is not distinct in the modified estimate of input hours, hence it is modification C.

(i) at hourly rate of ₹ 200 for 50 hours	Hours	Rate (₹)	(₹)
Original contract	200	250	50,000

Modification	50	200	10,000
Total	250	240	60,000
Revenue recognised (A)	100	250	25,000
Modified recognition (B)	100	240	24,000
Adjustment for past revenue recognition (A – B)			(1,000)
Revenue recognition in future	150	240	36,000

(ii) at hourly rate of ₹ 200 for 150 hours	Hours	Rate (₹)	(₹)
Revenue recognised (A)	100	250	25,000
Modification for remaining hours	150	200	30,000
Total	250	220	55,000
Modified recognition (B)	100	220	22,000
Adjustment for past revenue recognition (A – B)			(3,000)
Revenue recognition in future	150	220	33,000

(iii) at hourly rate of ₹200 for 250 hours	Hours	Rate (₹)	(₹)
Modification for total hours	250	200	50,000
Revenue recognised (A)	100	250	25,000
Modified recognition (B)	100	200	20,000
Adjustment for past revenue recognition (A – B)			(5,000)
Revenue recognition in future	150	200	30,000

Illustration 23

Determine whether there arise single or multiple performance obligations for the following contracts with customers?

- (a) A Ltd. Enter into a contract with a customer for installing a central air-conditioner system including site preparation, assembling of plants and test running the system.
- (b) A Ltd. enter into a contract with a customer for installing a central air-conditioning system and a power generating plant for support of the air-conditioning system. However, the power generating unit can also serve other electrical uses and could be acquired from other suppliers separately.
- (c) A Ltd. enter into a contract with a customer for installing a power generating plant which includes designing and construction of the plant.
 - (i) Designing could have been made by any other independent designer. Based on the approved design construction of the plant has to be done.
 - (ii) Designing and construction are continuously modified during installation.

- (d) A Ltd. enter into a contract with a customer for transfer of a software license including its installation, where:
- (i) Installation does not modify the software and installation could be done by any other entity.
 - (ii) Installation is customised to modify the software with additional functionalities.

Solution:

- (a) site preparation, assembling of plants and test running are integrated in single performance obligation.
- (b) As power generating unit can serve other uses and could be procured from different supplier installation of power generation unit is distinct from installation of air-conditioning system. Hence, there are multiple performance obligations.
- (c) (i) Designing and construction are distinct performance obligations.
(ii) They are integrated and bundled into single performance obligation.
- (d) (i) Software license transfer and installation are distinct and there are two performance obligations.
(ii) They are integrated and bundled into single performance obligation.

Illustration 24

On 31.03.2020 A Ltd. enter into a contract with a customer for sale of goods of ₹ 4,000 granting 50% discount voucher to be availed in future purchase up to ₹ 3,000 within 30 days. Ordinarily 10% discount is allowed on sales. Ordinary discount will not be available to avail the 50% discount voucher. There is 60% probability that the customer will redeem the discount voucher and the estimated amount of purchase is ₹ 2,000 In April 2020 the discount vouchers are redeemed for purchase of additional goods of ₹ 2800. Find revenue recognition in 2019-20 and in 2020-21.

Solution:

There are two performance obligations one for sale of goods and other for sale of discount vouchers. Their standalone prices:

Goods 4000 less 10% ordinary discount	₹ 3,600
Discount Vouchers	₹ 480
Total	₹ 4080

[Value of vouchers = Discount in excess of ordinary rate of 10% × estimated Purchase amount × probability of purchase = (50 – 10)% × 2000 × 60% = 480]

Transaction price is ₹ 3600 which is sale price less current discount of 10%. It is to be allocated between performance obligations of goods and discount vouchers proportionately.

Allocation to goods	$₹3,600 \times (\frac{₹3600}{₹4080})$	= ₹3,176
Allocation to Discount Voucher	$₹3,600 \times (\frac{480}{4080})$	= ₹ 424

Thus in 2019-20 Revenue is recognised for ₹ 3176 only, which is transaction price less future discount. Discount Voucher is carried as a liability at ₹ 424.

In 2020-21 this liability will be cancelled and revenue will be recognised for ₹424, when the discount voucher is redeemed or expired.

The Transaction Price for additional sale is ₹2,800 less 50% discount voucher = ₹ 1,400; Total Revenue recognised is ₹1,400 + ₹ 424 = ₹ 1,824.

Thus we see that ₹ 424 is deducted from revenue of 2019-20 and added to revenue of 2020-21.

Illustration 25

On 01.08.2019 A Ltd. enter into a contract with a hotel for daily sanitisation of the building for 3 years at ₹ 12,000 per month. The customer receives and consume benefits each day. Determine the revenue to be recognised in 2019-20.

Solution:

It is a series of distinct goods and services constituting a single performance obligation to be satisfied over time and transaction price has to be allocated proportionately to the performance obligation satisfied.

Accordingly, for 8 months @ ₹ 12,000 per month, ₹ 96,000 will be the revenue to be recognised in 2019-20.

Illustration 26

On 01.01.2020 A Ltd. entered into a contract with B to sell 20 TV sets at a price of ₹ 50,000 per set and the goods were delivered in February, 2020. Determine revenue to be recognised by A in 2019-20 in the following circumstances:

- (i) 2 sets found damaged at the time of receiving and returned by B.
- (ii) 4 sets found not properly functioning in March, 2020 and they were replaced by A as per terms of warranty.
- (iii) It is not a sale but goods sent on consignment and B will sell the TV sets at ₹ 50,000 per set. 12 sets were sold by B.
- (iv) It is a contract of sale or return. The TV sets can be returned by B unconditionally within 3 months. The entity expects (a) full return; (b) 50% return

Solution:

- (i) Revenue is recognised for 18 sets at ₹ 9,00,000. 2 sets returned to inventory of defective items.
- (ii) Revenue is recognised for 20 sets at ₹ 10,00,000 at delivery (assumed warranty is required by law and subsequent replacement is not considered as performance obligation to be satisfied over time and to attract any allocation of contract price).
- (iii) Revenue is recognised for 12 sets at ₹ 6,00,000. The other 8 sets are recognised as asset (inventory) at cost.
- (iv) (a) No revenue is recognised on delivery as right of the customer to unconditionally return the goods has not expired and full return is expected. The amount received or receivable on delivery of the sets is recognised as a liability and asset (inventory) is recognised for all 20 sets at cost. The performance obligation will be satisfied at the point of time when that right to return will expire and then only revenue will be recognised cancelling the liability.
(b) Revenue will be recognised at ₹ 5,00,000 (50% of delivery) and for balance ₹ 5,00,000, liability will be recognised. Further, asset (inventory) should be recognised for 10 sets at cost.

Illustration 27

A. On 31.03.2017 X Ltd. Sold goods at a price of ₹ 1,33,100 payable on 31.03.2020. The implicit interest rate is 10% p.a. What would be the revenue to be recognized for the year 2016-17, 2017-18, 2018-19 and 2019-20?

Recognition Criteria.

- I. There is a contract with the customer in 2016-17.
- II. There is a performance obligation—selling goods.
- III. Transaction Price is determinable. The sale price is ₹ 1,33,100 payable after 3 yrs. Interest component at

10% pa is included in the price. The revenue to be recognised $(₹1,33,100 \times 1) \div (1.10)^3 = ₹1,00,000$ in the financial year 2016-17.

IV. Transaction price is fully allocated to the performance obligation.

V. Revenue is recognized as performance obligation is satisfied.

The interest component of $₹(1,33,100 - 1,00,000) = ₹33,100$ will be recognized as interest income in F.Y.

2017-18 : ₹ 10,000 (10% × ₹1,00,000)

2018-19 : ₹ 11,000 (10% × ₹1,10,000)

2019-20 : ₹ 12,100 (10% × ₹1,21,000)

Accounting for the years	Particulars		Dr.	Cr.
			(₹)	(₹)
16-17	Customer A/c	Dr.	1,00,000	
	Accrued Interest A/c	Dr.	33,100	
	To, Sales A/c			1,00,000
	To, Liability for Unearned Interest A/c			33,100
17-18	Liability for Unearned Interest A/c	Dr.	10,000	
	To, Interest Income A/c			10,000
18-19	Liability for Unearned Interest A/c	Dr.	11,000	
	To, Interest Income A/c			11,000
19-20	Liability for Unearned Interest A/c	Dr.	12,100	
	To, Interest Income			12,100
19-20	Bank a/c	Dr.	1,33,100	
	To, Customer a/c			1,00,000
	To, Accrued Interest a/c			33,100

B. On 01.04.2019 X Ltd. Sold goods at a price of ₹ 1,30,000 payable on 31.07.2019. The implicit interest rate is 12% p.a. What would be the revenue to be recognized for the year 2019-20?

Solution:

The financing component for 4 months amounts to $₹1,30,000 \times r/(1+r) = ₹5000$, [where $r = 0.12 \times 4/12 = 0.04$] But such financing component is not considered significant as the period is normal credit period. Hence, the entire sale value is recognised as revenue from contract with customer.

C. On 01.04.2019 X Ltd. sold goods at a price of ₹ 1,25,000 plus interest at the rate of 30% pa payable on 31.07. 2019 at the end of normal credit period of 4 months. What would be the revenue to be recognized for the year 2019-20?

Solution:

Any abnormal interest charged is not considered a financing component of the contract price, rather included as part of revenue from contract with customer. As the credit period is normal ₹ 1,25,000 plus interest ₹ 10,000 = ₹ 1,35,000 is recognised as revenue from contract with customer.

- D. On 31.07.2019 X Ltd. sold goods at a price of ₹ 1,25,000 plus interest at the rate of 30% pa payable on 31.07.2020. Normal interest rate is 10% pa. What would be the revenue to be recognized for the year 2019-20?

Solution:

As the credit period is longer than normal and the rate of interest charged is significantly different from normal, ₹ 1,25,000 plus interest in excess of normal = ₹ 1,25,000 + 20% × ₹ 1,25,000 = ₹ 1,50,000 is recognised as revenue from contract with customer in 2019-20 as the performance obligation is satisfied by sale of goods. The normal interest for 1 year is recognised as interest income to be distributed for 8 months in year 2019-2020 and for 4 months in 2020-2021.

Illustration 28

On 01.12.2019 A Ltd. enter into a contract with customer to install a system at ₹ 20 lakhs and implement a software by June 2020 at ₹ 80 lakhs plus ₹ 15 lakhs bonus for completing software implementation by April 2020. Initially A Ltd. estimated the contract price at 1 crore for two performance obligations – system installation and software implementation by June 2020.

In March 2020 the company found system installation complete and software implementation 80% complete with confidence to earn bonus of ₹ 15 lakhs by completing implementation by April 2020. Compute revenue to be recognised in 2019-20.

Solution:

Bonus of ₹ 15 Lakhs is the variable consideration considered as change in contract price to be allocated to performance obligation of software implementation and recognised to the extent of performance obligation satisfied over time.

Thus, revenue recognition in 2019-2020:

System installation completed ₹ 20 Lakhs; and

Software implementation 80% completed = (₹ 80 lakhs + ₹ 15 lakhs) × 80% = ₹ 76 lakhs.

Had the software implementation be satisfied at a point in time when completed and control is transferred in April 2020, no revenue would be recognised proportionately in 2019-2020 for software implementation.

Illustration 29

A Ltd. enter into a contract with a customer for construction of a machine at the site of the customer at ₹ 8 lakhs and for supply of spare parts at ₹ 1.6 lakhs in the next financial year but to hold the spare parts in A Ltd's warehouse separately to be delivered to the customer's factory as and when required in following 3 financial years for additional consideration of ₹ 20,000 pa. Recognise revenue in the financial years if the contract is duly performed.

Solution:

In the year of contract no revenue is recognised as no performance obligation satisfied.

In the next year ₹8 lakhs is recognised for completing the construction and transfer of control at the point in time.

Further ₹ 1.6 lakhs is recognised for supply of spare parts although it is held in warehouse of A Ltd. as custodian as control is transferred.

₹ 20,000 in each of the 3 years next shall be recognised as revenue from custodial services.

Solved Case

Case 1

The accountant of Forest Ltd. is provided the following data about the Ind AS complied company.

(Amount in ₹)

Year 2021-2022	For Accounting Purpose	For Taxation Purpose
Accounting Profit	2,00,000	
Depreciation	40,000	60,000
Accrued Interest	20,000	
Interest Received for the current year	10,000	10,000
Carrying amount of PPE before charging current depreciation	2,40,000	
Tax Base of PPE before charging current depreciation		2,00,000
Provision for Gratuity and Leave encashment	30,000	
Tax rate is 30%		

The accountant is seeking your help accounting for income taxes in financial accounting based on Ind AS 12.

Prepare a note to help the accountant in defining and computing (i) Taxable Profit; (ii) Current Taxes; (iii) Carrying amount of assets and liabilities; (iv) Tax Base; (v) Taxable Temporary Differences/ Deductible Temporary Differences (vi) Deferred Tax Liabilities/Deferred Tax assets; (vii) Deferred Tax and (viii) Tax Expenses.

Solution:

(i) Taxable Profits = Accounting Profits + Accounting Depreciation + Provision for Gratuity etc. – Accrued Interest income – Taxable Depreciation = ₹2,00,000 + ₹40,000 + ₹30,000 – ₹20,000 – ₹60,000 = ₹1,90,000

			Carrying Amount ₹	(iv) Tax Base (₹)	(v) Taxable / (Deductible) Temporary difference [Deferred Tax Liab./ (Asset)] (₹)	(₹)
	a	PPE before depreciation	2,40,000	2,00,000	40,000	
	b	Less: Depreciation	40,000	60,000		
(iii)	c	Balance	2,00,000	1,40,000	60,000	
(iii)	d	Interest accrued	20,000	0	20,000	
(iii)	e	Prov for Gratuity and Leave encashment	30,000	0	(30,000)	

	f	Change in Temporary Difference (c-a+d+e)			10,000	
(vii)	g	Deferred Tax = $0.3 \times f$				3,000
(ii)	h	Current Tax = $0.3 \times$ Taxable Profit = 0.3×190000				57,000
(viii)	i	Tax Expense = Accounting profit $\times 0.3 = 200000 \times 0.3$ [g+h]				60,000
(vi)	j	Deferred Tax Assets [e]				30,000
(vi)	k	Deferred Tax Liabilities [c+d]				80,000

Case 2

River Ltd. has entered into a 3-year contract with Ocean Ltd. of an equipment for annual payments (at the end of every year) of ₹ 80000 and the residual value at the end of lease of ₹ 50000, guaranteed up to a loss of ₹ 40000. The contract conveyed the right to control the use the machine in its factory. Interest rate implicit is 10%. At the end of the lease the machine is valued at ₹22000.

- A. You are required to make accounting of the transactions in compliance with Ind AS 116 in the books of Hill Ltd. Apply SLM for depreciation.
- B. Mountain Ltd. carried the machine at ₹ 220000 having 5-year life with residual value of ₹ 50000 at the end of lease term. The lease transferred substantially all the risks and rewards incidental to ownership of the machine. IRR = 13.87%.

You are required to make accounting of the transactions in compliance with Ind AS 116 in the books of Mountain Ltd.

Solution:

- A. Here, we find that the contract is, or contains, a lease.

At the commencement date, the lessee (X) shall recognise (I) a right-of-use asset and (II) a lease liability.

At the commencement date, a lessee shall measure the right-of-use asset at cost. The cost of the right-of-use asset shall comprise the amount of the initial measurement of the lease liability. The lease payments shall be discounted using the interest rate implicit in the lease. Lease payments included in the measurement of the lease liability comprise fixed payments and amounts expected to be payable by the lessee under residual value guarantees.

At 10% implicit rate of interest the (Right-of-use) ROU Asset and Lease Liability are initially recognised at present value of payments as shown below.

Year	Payments (₹)	Disc. Factor	DCF at 10% (₹)
1	80,000	0.909091	72,727
2	80,000	0.826446	66,116
3	80,000	0.751315	60,105
3	40,000	0.751315	30,053

Year	Payments (₹)	Disc. Factor	DCF at 10% (₹)
Present value			2,29,001

Lease Liability repayment and interest

Year	Interest (₹)	Payments/remission (₹)	Balance (₹)
0			2,29,001
1	22,900	80,000	1,71,901
2	17,190	80,000	1,09,091
3	10,909	80,000	40,000
3	0	28,000	28,000
3	0	12,000	0

ROU Asset Depreciation for the lease period

Year	Depreciation Straight line (₹)	Balance (₹)
0		2,29,001
1	76,334	1,52,667
2	76,334	76,334
3	76,334	0

A lessee applied the depreciation requirements in Ind AS 16, Property, Plant and Equipment, in depreciating the right-of-use asset for the lease term using SLM.

Journal			Dr.	Cr.
Date	Particulars		(₹)	(₹)
At commencement	ROU Asset A/c To Lease Liability A/c	Dr.	2,29,001	2,29,001
At the end of Year 1	Interest Expenses A/c To Lease Liability A/c	Dr.	22,900	22,900
	Lease Liability A/c To Bank A/c	Dr.	80,000	80,000
	Depreciation A/c To ROU Asset A/c	Dr.	76,334	76,334
At the end of Year 2	Interest Expenses A/c To Lease Liability A/c	Dr.	17,190	17,190

Date	Particulars		(₹)	(₹)
	Lease Liability A/c To Bank A/c	Dr.	80,000	80,000
	Depreciation A/c To ROU Asset A/c	Dr.	76,334	76,334
At the end of Year 3	Interest Expenses A/c To Lease Liability A/c	Dr.	10,909	10,909
	Lease Liability A/c To Bank A/c	Dr.	80,000	80,000
	Depreciation A/c To ROU Asset A/c	Dr.	76,334	76,334
	Lease Liability A/c To Bank A/c (50,000 – 22,000 = 28,000, guaranteed up to 40,000) To P&L A/c (liability remission = 40,000 – 28,000)	Dr.	40,000	28,000 12,000

Balance Sheet	At the end of Year 1	At the end of Year 2	At the end of Year 3
ROU Asset	1,52,667	76,334	0
Lease Liability	1,71,901	1,09,091	0

Statement of P&L	Year 1 (₹)	Year 2 (₹)	Year 3 (₹)
Interest Dr	22,900	17,190	10,909
Depreciation Dr	76,334	76,334	76,334
Guarantee remission Cr			12,000

Statement of Cash Flows	Year 1 (₹)	Year 2 (₹)	Year 3 (₹)
Cash used in financing activities	80,000	80,000	80,000 28,000

B. It is a finance lease as the lease transferred substantially all the risks and rewards incidental to ownership of the machine.

(a) present value of lease receivable

Year	Payments	Disc. Factor	DCF at 10%
1	80,000	0.909091	72,727

Year	Payments	Disc. Factor	DCF at 10%
2	80,000	0.826446	66,116
3	80,000	0.751315	60,105
3	40,000	0.751315	30,053
Present value			2,29,001

(b) Deferred selling profits at commencement

Particulars	Workings	₹
Revenue = Present value of lease receivable		2,29,001
Cost of goods sold:		2,12,487
Carrying Value	2,20,000	
Less: Unguaranteed residual ₹10,000 × 0.7513	7,513	
Deferred selling profits at inception		16,514

(c) Net Investment in Lease at commencement = Present value of lease receivable + Unguaranteed residual – Deferred selling profits = ₹ 2,20,000 = Carrying amount of the underlying asset.

(d) Interest income includes interest on the lease receivable, accretion of the unguaranteed residual value and amortisation of deferred selling profit. The rate for recognising interest income to produce a constant periodic rate of return on the remaining net investment is IRR = 13.87% [excel fx: IRR (-₹2,20,000, ₹80,000, ₹1,30,000) = 13.87%]

(e) Interest Income and balance of Net Investment in Lease

	(₹)
Net Investment in Lease at commencement	2,20,000
Add Interest Income @ 13.87% = ₹2,20,000 × 13.87%	30,514
Total	2,50,514
Less Payment	80,000
Balance at the end of year 1	1,70,514
Add Interest Income	23,651
Total	1,94,165
Less Payment	80,000
Balance at the end of year 2	1,14,165
Add Interest Income	15,835
Total	1,30,000
Less Payment	80,000

	(₹)
Less Payment for Guaranteed loss borne by Lessee	28,000
Returned at residual value at the end of year 3	22,000
Net Investment in Lease at the end of Lease	0

Journal:

Dr.

Cr.

Date	Particulars	Dr. (₹)	Cr. (₹)
At the inception	Net Investment in Lease	Dr. 2,20,000	
	To PPE		2,20,000
At the end of year 1	Bank	Dr. 80,000	
	To Interest Income		30,514
	To Net Investment in Lease [80000 – 30514]		49,486
At the end of year 2	Bank	Dr. 80,000	
	To Interest Income		23,651
	To Net Investment in Lease		56,349
At the end of year 3	Bank	Dr. 80,000	
	To Interest Income		15,835
	To Net Investment in Lease		64,165
	PPE	Dr. 22,000	
	Bank	Dr. 28,000	
	To Net Investment in Lease		50,000

Balance sheet	At inception	At the end of Year 1	At the end of Year 2	At the end of Year 3
Net Investment in Lease	2,20,000	1,70,514	1,14,165	0
PPE				22,000

SP&L	Year 1	Year 2	Year 3
Interest Income	30,514	23,651	15,835

Statement of Cash Flows	At the end of Year 1	At the end of Year 2	At the end of Year 3
Cash from investing activities	80,000	80,000	80,000
			28,000

Case 3

Dawn Ltd. owns one acre of land with an old building beside a river. Currently the property is used as a holiday resort and market value of the property is ₹ 2 Crores for land and 0.5 crore for the building. However, Dawn Ltd. has also contemplated the idea of converting the property into an amusement park for which the existing building has to be demolished and many new small constructions and other developments of the land have to be made. The management found this alternative use of the property to be physically possible, legally permissible and financially more viable. The market value of the land at its potential use as amusement park is estimated at ₹ 4 crores. Costs of demolition of the old building, erecting other constructions and making other developments for converting the holiday resort into amusement park are determined at ₹ 80 lakhs in total.

The management is confused about the fair valuation of the property. They asked for opinion of a professional accountant in regard the following alternative propositions:

- i. The property's fair value under its current use as a holiday resort should be the market value of ₹ 2.5 crores.
- ii. The property's fair value should be the market value of ₹ 4 crores for the land's potential use as amusement park.
- iii. The property's fair value should be ₹ 4.5 crores being the market value of ₹ 4 crores for the land's potential use as amusement park plus the market value of the building of ₹ 0.5 crore.
- iv. The fair value of land should be ₹ 3.2 crores (being the market value of for the land's potential use as amusement park of ₹ 4 crores less total conversion costs of ₹ 80 lakhs) and fair value of building should be ₹ 0.5 crore.
- v. The fair value of land should be ₹ 3.2 crores and fair value of building should be nil.

Give your opinion as a professional accountant with due reference of relevant Ind AS.

Solution:

Ind AS 113 Fair Value Measurement is applicable. The 'highest and best use' is the appropriate model of measuring fair value.

- i. Current use of property is not the highest and best use. Hence, based on current use market value of ₹ 2.5 crores are not acceptable as fair value.
- ii. Market value of ₹ 4 crores for the land's potential use as amusement park is also not acceptable as fair value at the reporting date as redevelopment/conversion cost is not adjusted.
- iii. The property's fair value of ₹ 4.5 crores being the market value of ₹ 4 crores for the land's potential use as amusement park plus the market value of the building of ₹ 0.5 crore is also not acceptable as conversion cost is not adjusted and the building attracts no share of the market value of the amusement park, where the building has to be demolished.
- iv. The fair value of land should be ₹ 3.2 crores being the market value of for the land's potential use as amusement park of ₹ 4 crores less total conversion costs of ₹ 80 lakhs, but the market value of the current building on the property's current use is no more relevant and acceptable.
- v. The fair value of land should be ₹ 3.2 crores being the market value of for the land's potential use as amusement park less total conversion costs. The adjusted market value of potential use of the property being greater than the market value under current use, based on 'best and highest use' the adjusted market value of the potential use has been recognised as fair value. Fair value of building should be nil as the market value of the current building on the property's best and highest use as amusement park is zero.

Case 4

Dust Ltd. has an equity investment in Dark Ltd.'s shares and accounts for the shares at fair value through profit and loss. Dark Ltd.'s shares are quoted in BSE and in Japan Exchange Group. On 31-03-2022 Dark Ltd.'s share is closed at ₹780 in BSE and at equivalent to ₹875 in Japan Exchange Group. However, significant activities on the shares are being done in BSE only.

- (i) The accountant of Dust Ltd. argues that fair value of a share in Dark Ltd. should be measured based on the Market Approach and the quoted price in Japan Exchange Group being higher is considered as level I input. Accordingly, fair value is determined at ₹ 875.

After markets closed on 31.03.2022 Dark Ltd. announced news of some bad events occurred during the day and in the next morning Dark Ltd.'s shares opened in BSE at ₹ 645 and at equivalent to ₹ 730 in Japan Exchange Group.

- (ii) The accountant of Dust Ltd. sticks to the fair value of ₹ 875 per share on the argument that it is based on the Input Level I quoted price in the active market on the measurement date of 31.03.2022.

Examine the validity of the arguments of the accountant of Dust Ltd. and determine the fair value of a share in Dark Ltd. with due reference of the relevant Ind AS.

Solution:

- (i) The argument of the accountant that the higher of the quoted prices should be taken as the fair value is not tenable as the most advantageous market can be considered only in absence of a principal market. Since significant activities on the shares are being done in BSE only, BSE is the principal market and the quoted price in the BSE is the Level I input for fair value measurement. Thus, ₹ 780 should be the fair value of a share in the accounts of Dust Ltd. Further, when quoted price in active market is available as Level I input, there is no need for and scope of using any valuation techniques like market approach as suggested by the accountant.
- (ii) Again, the accountant's argument is not tenable as the quoted price does not faithfully represent the fair value on the measurement date due to the bad news announced after the close of trading. Dust Ltd. should adjust the quoted price on 31.03.2022 for the new information and measure the fair value at ₹ 645 (information adjusted observable input) and disclose the measurement as Level II input.

Exercise

A. Theoretical Questions:

⊙ Multiple Choice Questions

1. The major three approaches to valuation of shares are:
 - a. Income Approach
 - b. Net Assets Approach
 - c. Market Approach
 - d. All of the above
2. The major bases of asset valuation for a going concern:
 - a. Book Value
 - b. Net Replacement Value
 - c. Net Realisable Value
 - d. All of the above
3. The Income approach for Valuation of Shares includes the models/Techniques:
 - a. Discounted Cash Flow
 - b. Dividend Discount Model
 - c. Maintainable Profits Basis
 - d. All of the above
4. Some of the methods of Goodwill Valuation are
 - a. Capitalisation method
 - b. Super profits method
 - c. Average Maintainable Profits method
 - d. All of the above
5. The ways of determining the value of goodwill using the capitalisation approach
 - a. Capitalisation of Average Profits
 - b. Capitalisation of Super Profits
 - c. Both a and b
 - d. Capitalisation of Average Future maintainable profit
6. The _____ of an item of property, plant and equipment shall be recognised as an asset if, and only if: (i) it is probable that _____ associated with the item will flow to the entity; and (ii) the _____ of the item can be measured reliably.
 - a. cost, future economic benefits, cost
 - b. future economic benefits, cost, future economic benefits
 - c. cost, cost, cost
 - d. future economic benefits, future economic benefits, future economic benefits

7. Property Plant and Equipment (PPE) are initially recognized at _____
- purchase price
 - fair value
 - cost
 - future economic benefits

Answer:

1.	2.	3.	4.	5.	6.	7.
d.	d.	d.	d.	c.	a	c

⦿ **Fill in the Blanks**

- Every firm in an industry is expected to earn a normal rate of return. If a particular firm of the industry manages to earn a rate of return that happens to be more than the normal industry rate of return, then such a firm is said to be earning _____.
- _____ refers to a series of continuous cash flows (either cash inflows or cash outflows) of equal amount that occur in every period, over a specified period of time.
- _____ refers to the excess of current value of Total Assets (excluding Goodwill and Fictitious assets) over the external liabilities.
- The phrase _____ refers to the expected number of future years for which the firm is expected to earn the average profit from the year of purchase.
- _____ represents the capacity of the business to earn excess profit for a period of time over normal profit.

Answer:

1.	super profits	2.	Annuity
3.	Net Assets	4.	Number of Years of Purchase
5.	Goodwill		

⦿ **Short Essay Type Questions**

- State some of the most important purposes of Share Valuation.
- Enumerate the different factors that affect the valuation of shares.
- Explain in brief the different variables which influence the valuation of goodwill under ‘Super Profit method’.
- State the steps involved to find value per share based on market approach.

⦿ **Essay Type Questions**

- Under Income Approach how is the value of a business measured using different methods or techniques? Explain. Examine whether capitalisation of income is an application of valuation under income approach.
- Explain different methods of goodwill valuation. Do you think valuation of goodwill is required to find value per share under (i) income approach; (ii) net asset approach; and (iii) market approach.

B. Numerical Questions:

⊙ **Multiple Choice Question**

1. X Ltd. borrowed \$6000 for construction of a qualifying asset at 3% interest pa on 01.04.2021 when \$1 = ₹60, which is due for payment on 31.03.2023. The company could borrow the amount in rupees at 12% interest pa. Interest is payable on 31st 2023. Construction of asset will continue till 31-03-2023. Answer Q (i) to Q (ix).
 - (i) If on 31.03.2022 \$1 = ₹ 70 which of the following statements is not true?
 - a. Exchange loss = ₹(60 – 70) × \$ 6,000 = ₹ 60,000
 - b. Cost of borrowing in foreign currency = 3% × \$ 6,000 × ₹ 70 = ₹ 12,600
 - c. Cost of borrowing in functional currency = 12% × \$ 6,000 × ₹ 60 = ₹ 43,200
 - d. Cost of borrowing in foreign currency = 3% × \$ 6000 × ₹ 60 = ₹10,800
 - (ii) If on 31.03.2021 \$1 = ₹ 70, borrowing cost = Cost of borrowing in foreign currency plus
 - a. Exchange loss of ₹ 60,000
 - b. Exchange loss less cost of borrowing in foreign currency = ₹ 60,000 – ₹ 12,600 = ₹ 47,400
 - c. Cost of borrowing in functional currency less Cost of borrowing in foreign currency = ₹ 43,200 – ₹12,600 = ₹ 30,600 (not exceeding exchange loss)
 - d. ₹ 60,000 – ₹ 43,200 = ₹ 16,800
 - (iii) If on 31-03-20X2 \$1 = ₹ 70, borrowing cost is
 - a. ₹ 60,000
 - b. ₹ 12,600 + ₹ 30,600 = ₹ 43,200
 - c. ₹ 12,600 + ₹16,800 = ₹ 29,400
 - d. ₹30,000
 - (iv) If on 31-03-20X2 \$1 = ₹ 63, borrowing cost is
 - a. Exchange loss of ₹ 18,000
 - b. Cost of borrowing in foreign currency = 3% × 6000 × ₹ 63 = ₹ 11,340
 - c. Cost of borrowing in functional currency = ₹12% × 6000 × ₹60 = ₹ 43,200
 - d. ₹ 11,340 + ₹ 18,000 [(c-b) not exceeding (a)] = ₹ 29,340
 - (v) If on 31-03-20X2 \$1 = ₹ 70 and on 31-03-20X3 S1 = ₹ 54, borrowing cost in the year ending on 30-03-20X3 is
 - a. reduced by exchange gain = ₹ (60 – 54) × \$ 6000 = ₹ 36,000
 - b. reduced by exchange gain not exceeding exchange loss previously recognised as adjustment = ₹30,600
 - c. increased by exchange gain = ₹ (60 – 54) × \$ 6000 = ₹ 36,000
 - d. increased by ₹ 30,600

- (vi) If on 31-03-2022 \$1 = ₹ 70 and on 31-03-2023 \$1 = ₹ 57, borrowing cost in the year ending on 30-03-2023 is
- reduced by exchange gain not exceeding exchange loss previously recognised as adjustment = ₹ $(60 - 57) \times \$ 6000 = ₹ 18,000$
 - exchange loss previously recognised as adjustment = ₹ 30,600
 - increased by exchange gain = ₹ 18,000
 - increased by ₹ 30,600
- (vii) If on 31-03-2022 \$1 = ₹ 70, in the year ending on 30-03-20X2:
- borrowing cost capitalised is ₹ 12,600 and Exchange loss expensed in SOPL is ₹ 60,000
 - borrowing cost capitalised is ₹ 12,600 + ₹ 30,600 = ₹ 43,200 and Exchange loss expensed in SOPL is ₹ $(60,000 - 30,600) = ₹ 29,400$
 - borrowing cost capitalised is ₹ 30,600 and Exchange loss expensed in SOPL is ₹ $(60,000 - 30,600) = ₹ 29,400$
 - None of the above
- (viii) If on 31-03-2022 \$1 = ₹ 70 and on 31-03-2023 \$1 = ₹ 54, in the year ending on 30-03-2023:
- borrowing cost capitalised is ₹ 9,720 - ₹ 36,000 = - ₹ 26,280.
 - borrowing cost capitalised is ₹ 9,720
 - borrowing cost capitalised is ₹ 9,720 - ₹ 30,600 = - ₹ 20,880
 - Nil
- (ix) If on 31-03-2022 \$1 = ₹ 70 and on 31-03-2023 \$1 = ₹ 57, in the year ending on 30-03-2023:
- borrowing cost capitalised is ₹ 10,260 - ₹ 18,000 = - ₹ 7,740
 - borrowing cost capitalised is ₹ 10,260
 - borrowing cost capitalised is ₹ 10,260 - ₹ 30,600 = ₹ 20,340.
 - Nil
2. X Ltd. borrowed ₹6,00,000 at 15% interest from bank and issued 12% Debenture of ₹ 4,00,000 for construction of a factory and an office building on 01.04.2021. The amount was utilised for construction of factory ₹3,00,000 on 01.07.2021 and for construction of building ₹ 7,00,000 on 01.10.2021, the unutilised amount was invested at 10% Bonds. Answer Q10 to Q11.
- (i) Which of the following statements is not true?
- The capitalisation rate is $15 \times 0.6 + 12 \times 0.4 = 13.8\%$
 - Borrowing cost for factory without adjusting investment income is $13.8\% \times ₹ 3,00,000 = ₹ 41,400$
 - Borrowing cost for building without adjusting investment income is $13.8\% \times ₹ 7,00,000 = ₹ 96,600$
 - Borrowing cost for building without adjusting investment income is $13.8\% \times 7,00,000 \times 6/12 = ₹ 48,300$

(ii) Which of the following statements is not true?

- The investment income is ₹ 3,00,000 × 3/12 × 7% + ₹ 7,00,000 × 6/12 × 7% = ₹ (5,250 + 24,500) = ₹ 29,750
- The investment income is ₹ 3,00,000 × 6/12 × 7% + ₹ 7,00,000 × 3/12 × 7% = ₹ (10,500 + 12,250) = ₹ 22,750
- borrowing cost capitalised for factory is ₹ 41,400 - ₹ 5,250 = ₹ 36,150.
- borrowing cost capitalised for building is ₹ 96,600 - ₹ 24,500 = ₹ 72,100.

Answer:

1. (i)	1. (ii)	1. (iii)	1. (iv)	1. (v)	1. (vi)	1. (vii)	1. (viii)	1. (ix)	2. (i)	2. (ii)
d.	c.	c.	d.	b.	a.	d.	c.	a.	d.	b.

⊙ **Comprehensive Numerical Problems**

1.

Year	2018	2019	2020	2021
CF (₹ in Lakhs)	500	600	700	800

- Find value of the business on 01-01-2021, if CF remains constant from 2021 to infinity, given that WACC = 10%.
- Find value of the business on 01-01-2020 if CF grows at 4% pa from 2022 to infinity, given that WACC = 10%.
- Find value of the business on 01-01-2019 if CF remains constant from 2021 to infinity, given that WACC = 10%.

2.

Data provided for forthcoming Year 1	₹ in Lakh
EBIT	800
Depreciation	160
Capex	200
Interest	300
Increase in non-cash working capital	100
Debt Capital at year 0	3,000
Debt repaid during year 1	500
Debt issued during year 1	600

Further information:

Tax rate = t	25%
WACC	10%
No of equity shares	6000000

Find:

- NOPAT;
- CF;
- FCFF;
- FCFE;
- Value of business based on constant (i) CF; (ii) FCFF; (iii) FCFE
- Value of business when growth rate is 5% based on (i) CF; (ii) FCFF; (iii) FCFE
- Value per share based on FCFF when constant growth rate is 5%.
- Value per share based on FCFE when constant growth rate is 5%.

3. The following abridged Balance Sheet as on 31st March, 2021 pertains to K Ltd.

Liabilities	₹in lakhs	Assets	₹in lakhs
Share Capital :		Goodwill, at cost	600
100 lakh Equity shares of ₹10 each, fully paid up	1,000	Other Fixed Assets	9,030
60 lakh Equity shares of ₹10 each, ₹8 paid up	480	Current Assets	3,000
50 lakh Equity shares of ₹5 each, fully paid-up	250	Loans and Advances	900
Reserves and Surplus	4,000		
Secured Loans	5,000		
Current Liabilities	2,000		
Provisions	800		
	13,530		13,530

You are required to calculate the following for each one of three categories of equity shares appearing in the above-mentioned Balance Sheet:

- Intrinsic value on the basis of book values of Net Assets;
- Value per share on the basis of dividend yield.

Normal rate of dividend in the concerned industry is 12%, whereas K Ltd. has been paying 15% dividend for the last four years and is expected to maintain it in the next few years; and

- Value per share on the basis of EPS.

For the year ended 31st March, 2021 the company has earned ₹1740 lakh as profit after tax, which can be considered to be normal for the company. Average EPS for a fully paid share of ₹10 of a Company in the same industry is ₹1.8.

4. AB Ltd, earned profits during the past 5 years as follows:

Year	20 × 1	20 × 2	20 × 3	20 × 4	20 × 5
Profits (₹)	30,000	36,000	40,000	44,000	50,000

Determine the value of goodwill at the end of 20x5 in each of the following independent cases:

Case (a):

It was decided to value the Goodwill on the basis of 2 years' purchase of average profit of last five years.

Case (b):

It was decided to value the Goodwill on the basis of 4 years' purchase of average profit of last five years after giving weights of 1, 2, 3, 6 and 8 to the profits chronologically.

Case (c):

It was decided to value the Goodwill on the basis of 3 years' purchase of weighted average profit of last five years giving maximum weightage to the recent results.

Case (d):

It was decided to value the Goodwill on the basis of 3 years' annuity of expected annual profits of ₹ 50,000 at 10% rate of discounting.

Case (e):

It was decided to value the Goodwill on the basis of 4 years' purchase of super profits, normal rate of return is 10%. Average capital employed is ₹ 4,00,000. Future maintainable profit is the simple average profit of last five years.

Case (f):

It was decided to value the Goodwill on the basis of capitalization of super profits, capitalization rate is 10%. Average capital employed is ₹ 4,00,000. Future maintainable profit is ₹ 50,000.

Case (g):

It was decided to value the Goodwill on the basis of 2½ years' purchase of simple average profit of last five years. In this regard the following were observed:

- (i) an abnormal loss of ₹ 1,000 was charged against the profit of 20x3;
- (ii) Profit of 20x4 included a non-recurring receipt of ₹ 2,000.
- (iii) closing stock of 2015 was over-valued by ₹ 3,000.

5. The following is the Balance Sheet (extract) of Z Ltd. as on 31st March, 2021:**Balance Sheet**

Equity and Liabilities	₹ in Lakh	Assets	₹ in Lakh
3,00,000 Equity shares of ₹10 each fully paid	30,00,000	Building	20,00,000
12% Redeemable preference shares of ₹100 each fully paid	19,00,000	Plant & Machinery	22,00,000
General Reserve	15,00,000	Furniture	10,00,000
Profit & Loss A/c	3,00,000	Investments	16,00,000
Secured Loan	10,00,000	Stock	12,00,000
Creditors	27,00,000	Debtors	20,00,000
		Bank Balance	4,00,000
	1,04,00,000		1,04,00,000

Additional Information:

- PPE are worth 10% more than book value. Stock is overvalued by ₹2,00,000. Debtors are to be reduced by ₹80,000. Trade investments, which constitute 10% of the total investments are to be valued at 20% below cost.
- Trade investments were purchased on 01.04.2020. 50% of non-trade investments were purchased on 01.04.2019 and the rest on 01.04.2020. Non-trade investments yielded 15% return on cost.
- In 2019-2020 Furniture with a book value of ₹1,00,000 was sold for ₹50,000. This loss should be treated as non-recurring or extraordinary item for the purpose of calculating adjusted average profit.
- In 2018-2019 new machinery costing ₹2,00,000 was purchased, but wrongly charged to revenue. This amount should be adjusted taking depreciation at 10% on reducing value method.
- Return on capital employed is 18% in similar businesses.
- Profits of last four years are as under:

Year	₹ in Lakhs
2017-2018	13,00,000
2018-2019	14,00,000
2019-2020	17,00,000
2020-2021	20,00,000

- It is assumed that preference dividend has been paid till date.
- Depreciation on the overall increased value of PPE (worth 10% more than book value) need not be considered. Depreciation on the additional value of only plant and machinery to be considered taking depreciation at 10% on reducing value method while calculating average adjusted profit.

Compute Goodwill at three years purchase of super profits based on simple average profits of last four years.

