



UNIVERSITY OF CALICUT

SCHOOL OF DISTANCE EDUCATION

ADVANCED CORPORATE ACCOUNTING

M Com

II SEMESTER

2027

OFFICE OF THE

ATTORNEY GENERAL

STATE OF NEW YORK

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McCom

REPORT OF THE



ADVANCED CORPORATE ACCOUNTING

M.Com

II SEMESTER



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SCHOOL OF DISTANCE EDUCATION**

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Study Material

M Com

II Semester

ADVANCED CORPORATE ACCOUNTING

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Reserved

SYLLABUS

MC2C7 – ADVANCED CORPORATE ACCOUNTING

80 Hours

Marks: 80

Objectives:

1. To provide theoretical knowledge of International Financial Reporting Standards.
2. To enable the students to gain ability to solve problems relating to Holding Company Accounts, Liquidation of Companies and various other Accounts

Module 1: International Financial Reporting Standards (IFRS): Introduction – Meaning – Scope – An Overview of the International Financial Reporting Standards – IFRS 1 to 13 – Role of IASB – Arguments for Global Convergence – Required disclosure as per IFRS – Achievements of IASB and Obstacles in Convergence – Difference between IFRS and Indian Accounting Standards – US GAAP.
15 Hours

Module 2: Accounting for Group companies – Holding Companies – Definition – Accounts Consolidation – Preparation of Consolidated Balance Sheet – Minority Interest – Pre-acquisition or Capital Profits – Cost of Control or Goodwill – Inter-company Balance – Unrealised Inter-company profits – Revaluation of assets and liabilities – Bonus Shares – Treatment of Dividend.
20 Hours

Module 3: Accounting for Corporate Restructuring - Internal – External – Merger and acquisition – Accounting for liquidation of companies – Preparation of Statement of Affairs – Deficiency/Surplus Account - Liquidator's Final Statement of Account – Receiver's Statement of Accounts
25 Hours

Module 4: Voyage Accounts – Meaning of important terms – Voyage in Progress – Farm Accounts – Characteristics – Advantages and Disadvantages – Final Accounts of Farms
10 Hours

Module 5: Human Resources Accounting – Objectives – Methods of valuation - Advantages and Disadvantages.
Accounting for Price Level Changes – CPP – CCA and Hybrid.
10 Hours

(Theory and Problems may be in the ratio of 30% and 70% respectively)

CONTENTS

		<u>Page</u>
Lesson 1	<u>MODULE 1</u> INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)	5
Lesson 2	<u>MODULE 2</u> ACCOUNTS OF HOLDING COMPANIES	20
Lesson 3	<u>MODULE 3</u> AMALGAMATION OF COMPANIES	58
Lesson 4	ACCOUNTING FOR INTERNALRE CONSTRUCTION	95
Lesson 5	LIQUIDATION OF COMPANIES	108
Lesson 6	<u>MODULE 4</u> VOYAGE ACCOUNTS	133
Lesson 7	FARM ACCOUNTS	138
Lesson 8	<u>MODULE 5</u> HUMAN RESOURCE ACCOUNTING (HRA)	147
Lesson 9	ACCOUNTING FOR PRICE LEVEL CHANGES (INFLATION ACCOUNTING)	154

MODULE – 1

INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

LESSON 1

INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

International Accounting Standards Board (IASB)

International Accounting Standards Board is an independent, privately – funded accounting standard setter based in London. Contributors include major accounting firms, private financial institutions, industrial companies throughout the world, central and development banks, and other international and professional organisations.

In March 2001 the International Accounting Standards Committee (IASC) Foundation was formed as a not for profit corporation incorporated in the USA. The IASC Foundation is the parent entity of the IASB. In July 2010 it changed its name to the International Financial Reporting Standards (IFRS) Foundation.

From April 2001 the IASB assumed the accounting standard setting responsibilities from the predecessor body, the International Accounting Standards Committee (IASC). The 14 members of the IASB come from nine countries and have a variety of backgrounds with a mix of auditors, preparers of financial statements, users of financial statements and an academic.

Objectives of the IASB

The following are the formal objectives of the IASB:

1. Develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards based on clearly articulated principles that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the various capital markets of the world and other users of the information to make economic decisions.
2. Promote the use and rigorous application of those standards.
3. Work actively with national standard-setters to bring about convergence of national accounting standards and IFRSs to high quality solutions.

Role of the IASB

Under the IFRS Foundation Constitution, the IASB has complete responsibility for all technical matters of the IFRS Foundation including:

- a) Full discretion in developing and pursuing its technical agenda, subject to certain consultation requirements with the Trustees and the public
- b) The preparation and issuing of IFRSs (other than Interpretations) and exposure drafts, following the due process stipulated in the Constitution

- c) The approval and issuing of Interpretations developed by the IFRS Interpretations Committee.

International Financial Reporting Standards (IFRS)

IFRS is a refined system of financial reporting which is going to benefit all the stakeholders in the coming years, together with improved corporate governance and increased free flow of capital across the globe.

International Financial Reporting Standards (IFRS) are a set of accounting standards developed by the International Accounting Standards Board (IASB) that is becoming the global standard for the preparation of public company financial statements.

IFRS is sometimes confused with International Accounting Standards (IAS), which are older standards that IFRS has now replaced. The goal of IFRS is to provide a global framework for how public companies prepare and disclose their financial statements. IFRS provides general guidance for the preparation of financial statements, rather than setting rules for industry-specific reporting.

IFRS Foundation

The IFRS Foundation is the legal entity under which the International Accounting Standards Board (IASB) operates. The Foundation is governed by a board of 22 trustees. IFRS Foundation is the new name of International Accounting Standards Committee (IASC), approved in January 2010.

IFRS Advisory Council

The IFRS Advisory Council is the formal advisory body to the IASB and the Trustees of the IFRS Foundation. It consists of a wide range of representatives from groups that are affected by and interested in the work of IASB. These include investors, financial analysts and other users of financial statements, as well as preparers, academics, auditors, regulators, professional accounting bodies and standard setters. Members of the Advisory Council are appointed by the Trustees.

IFRS Interpretations Committee

The IFRS Interpretations Committee is the interpretive body of the IFRS Foundation. Its mandate is to review on a timely basis widespread accounting issues that have arisen within the context of current IFRSs. The work of IFRS Interpretations Committee is aimed at reaching consensus on the appropriate accounting treatment (IFRIC Interpretations) and providing authoritative guidance on those issues.

Importance of IFRS

The following are the major importance of International Financial Reporting Standards:

- a) A business can present its financial statements on the same basis as its foreign competitors, making comparisons easier.
- b) Companies with subsidiaries in countries that require or permit IFRS may be able to use one accounting language company-wide.

- c) Companies may need to convert to IFRS if they are a subsidiary of a foreign company that must use IFRS, or if they have a foreign investor that must use IFRS.
- d) Capital market regulators must be aware of only one set of accounting standards and the companies will experience efficiency in raising capital and reduced information processing cost.
- e) The companies will no longer required to prepare its financial statement under different GAAP and make the task of listing shares in foreign exchange easier.

List of the International Financial Reporting Standards (IFRSs)

1	IFRS 1	First-time Adoption of International Financial Reporting Standards.
2	IFRS 2	Share-based Payment.
3	IFRS 3	Business Combinations.
4	IFRS 4	Insurance Contracts.
5	IFRS 5	Non-current Assets Held for Sale and Discontinued Operations.
6	IFRS 6	Exploration for and Evaluation of Mineral Resources.
7	IFRS 7	Financial Instruments: Disclosures.
8	IFRS 8	Operating Segments.
9	IFRS 9	Financial Instruments.
10	IFRS 10	Consolidated Financial Statements.
11	IFRS 11	Joint Arrangements.
12	IFRS 12	Disclosure of Interest in Other Entities.
13	IFRS 13	Fair Value Measurement.
14	IFRS 14	Regulatory Deferral Accounts.
15	IFRS 15	Revenue from Contracts with Customers.

Summary of IFRSs

The technical summary of important IFRSs is as under:

IFRS 1 - First-time Adoption of International Financial Reporting Standards

This IFRS was issued at 1 January 2013. The objective of this IFRS is to ensure that an entity's first IFRS financial statements, and its interim financial reports for part of the period covered by those financial statements, contain high quality information that: (a) is transparent for users and comparable over all periods presented; (b) provides a suitable starting point for accounting in accordance with International Financial Reporting Standards (IFRSs); and (c) can be generated at a cost that does not exceed the benefits.

An entity shall prepare and present an opening IFRS statement of financial position at the date of transition to IFRSs. This is the starting point for its accounting in accordance with IFRSs. An entity shall use the same accounting policies in its opening IFRS statement of financial position and throughout all periods presented in its first IFRS financial statements. Those accounting policies shall comply with each IFRS effective at the end of its first IFRS reporting period.

The IFRS requires disclosures that explain how the transition from previous GAAP to IFRSs affected the entity's reported financial position, financial performance and cash flows.

IFRS 2 - Share-based Payment

IFRS 2 was issued at 1 January 2012. The objective of this IFRS is to specify the financial reporting by an entity when it undertakes a share-based payment transaction. The IFRS requires an entity to recognise share-based payment transactions in its financial statements, including transactions with employees or other parties to be settled in cash, other assets, or equity instruments of the entity. There are no exceptions to the IFRS, other than for transactions to which other Standards apply.

This also applies to transfers of equity instruments of the entity's parent; or equity instruments of another entity in the same group as the entity, to parties that have supplied goods or services to the entity.

The IFRS prescribes various disclosure requirements to enable users of financial statements to understand: (a) the nature and extent of share-based payment arrangements that existed during the period; (b) how the fair value of the goods or services received, or the fair value of the equity instruments granted, during the period was determined; and (c) the effect of share-based payment transactions on the entity's profit or loss for the period and on its financial position.

IFRS 3 - Business Combination

This states that all business combinations are accounted for using purchase accounting, with limited exceptions. A business combination is to bringing together of separate entities or business into one reporting entity. A business can be operated managed for the purpose of providing return to investors or lower costs. An entity in its development stage can meet the definition of a business. In some cases the legal subsidiary is identified as the acquirer for accounting purposes (reverse acquisition). The date of acquisition is the date on which effective control is transferred to the acquirer. The cost of acquisition is the amount of cash equivalents paid, plus the fair value of other purchase considerations given, plus any cost directly attributable to the acquisition.

The fair values of securities issued by the acquirer are determined at the date of exchange. Costs directly attributable to the acquisition may be internal costs but cannot be general administrative costs. There is no requirement for directly attributable cost to be incremental.

IFRS 4 - Insurance Contracts

IFRS 4 was issued at 1 January 2013. The objective of this IFRS is to specify the financial reporting for insurance contracts by any entity that issues such contracts (described in this IFRS as an insurer) until the Board completes the second phase of its project on insurance contracts. In particular, this IFRS requires: (a) limited improvements to accounting by insurers for insurance contracts. (b) Disclosure that identifies and explains the amounts in an insurer's financial statements arising from insurance contracts and helps users of those financial statements understand the amount, timing and uncertainty of future cash flows from insurance contracts.

An insurance contract is a contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder. The IFRS applies to all insurance contracts (including reinsurance contracts) that an entity issues and to reinsurance contracts that it holds, except for specified contracts covered by other IFRSs.

The IFRS permits an insurer to change its accounting policies for insurance contracts only if, as a result, its financial statements present information that is more relevant and no less reliable, or more reliable and no less relevant. In particular, an insurer cannot introduce any of the following practices, although it may continue using accounting policies that involve them: (a) measuring insurance liabilities on an undiscounted basis. (b) Measuring contractual rights to future investment management fees at an amount that exceeds their fair value as implied by a comparison with current fees charged by other market participants for similar services. (c) Using non-uniform accounting policies for the insurance liabilities of subsidiaries.

The IFRS requires disclosure to help users understand: (a) the amounts in the insurer's financial statements that arise from insurance contracts. (b) The nature and extent of risks arising from insurance contracts.

IFRS 5 - Non-current Assets Held for Sale and Discontinued Operations

This IFRS was issued at 1 January 2013. The objective of this IFRS is to specify the accounting for assets held for sale, and the presentation and disclosure of discontinued operations. In particular, the IFRS requires: (a) assets that meet the criteria to be classified as held for sale to be measured at the lower of carrying amount and fair value less costs to sell, and depreciation on such assets to cease; (b) an asset classified as held for sale and the assets and liabilities included within a disposal group classified as held for sale to be presented separately in the statement of financial position; and (c) the results of discontinued operations to be presented separately in the statement of comprehensive income.

The IFRS: (a) adopts the classification 'held for sale'. (b) Introduces the concept of a disposal group, being a group of assets to be disposed of, by sale or otherwise, together as a group in a single transaction, and liabilities directly associated with those assets that will be transferred in the transaction. (c) Classifies an operation as discontinued at the date the operation meets the criteria to be classified as held for sale or when the entity has disposed of the operation.

An entity shall classify a non-current asset (or disposal group) as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

A discontinued operation is a component of an entity that either has been disposed of, or is classified as held for sale, and (a) represents a separate major line of business or geographical area of operations, (b) is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations or (c) is a subsidiary acquired exclusively with a view to resale.

IFRS 6 - Explorations for and Evaluation of Mineral Resources

IFRS 6 was issued at 1 January 2012. The objective of this IFRS is to specify the financial reporting for the exploration for and evaluation of mineral resources. Exploration and evaluation expenditures are expenditures incurred by an entity in connection with the exploration for and evaluation of mineral resources before the technical feasibility and commercial viability of extracting a mineral resource are demonstrable. Exploration for and evaluation of mineral resources is the search for mineral resources, including minerals, oil, natural gas and similar non-regenerative resources after the entity has obtained legal rights to explore in a specific area, as well as the determination of the technical feasibility and commercial viability of extracting the mineral resource. Exploration and evaluation assets are exploration and evaluation expenditures recognised as assets in accordance with the entity's accounting policy.

An entity shall determine an accounting policy for allocating exploration and evaluation assets to cash-generating units or groups of cash-generating units for the purpose of assessing such assets for impairment. Each cash-generating unit or group of units to which an exploration and evaluation asset is allocated shall not be larger than an operating segment determined in accordance with IFRS 8 Operating Segments.

An entity shall disclose information that identifies and explains the amounts recognised in its financial statements arising from the exploration for and evaluation of mineral resources.

IFRS 7 - Financial Instruments: Disclosures

This IFRS was issued at 1 January 2012. The objective of this IFRS is to require entities to provide disclosures in their financial statements that enable users to evaluate: (a) the significance of financial instruments for the entity's financial position and performance; and (b) the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the end of the reporting period, and how the entity manages those risks. The qualitative disclosures describe management's objectives, policies and processes for managing those risks. The quantitative disclosures provide information about the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel. Together, these disclosures provide an overview of the entity's use of financial instruments and the exposures to risks they create.

The IFRS applies to all entities, including entities that have few financial instruments (e.g. a manufacturer whose only financial instruments are accounts receivable and accounts payable) and those that have many financial instruments (e.g. a financial institution most of whose assets and liabilities are financial instruments).

When this IFRS requires disclosures by class of financial instrument, an entity shall group financial instruments into classes that are appropriate to the nature of the information disclosed and that take into account the characteristics of those financial instruments. An entity shall provide sufficient information to permit reconciliation to the line items presented in the statement of financial position.

IFRS 8 - Operating Segments

IFRS 8 was issued at 1 January 2013. 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.

This IFRS shall apply to: (a) the separate or individual financial statements of an entity: (i) whose debt or equity instruments are traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets), or (ii) that files, or is in the process of filing, its financial statements with a securities commission or other regulatory organisation for the purpose of issuing any class of instruments in a public market; and (b) the consolidated financial statements of a group with a parent: (i) whose debt or equity instruments are traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets), or (ii) that files, or is in the process of filing, the consolidated financial statements with a securities commission or other regulatory organisation for the purpose of issuing any class of instruments in a public market.

The IFRS requires an entity to report a measure of operating segment profit or loss and of segment assets. It also requires an entity to report a measure of segment liabilities and particular income and expense items if such measures are regularly provided to the chief operating decision maker. It requires reconciliations of total reportable segment revenues, total profit or loss, total assets, liabilities and other amounts disclosed for reportable segments to corresponding amounts in the entity's financial statements.

IFRS 9 - Financial Instruments

IFRS 9 was issued in July 2014. IFRS 9 is built on a logical, single classification and measurement approach for financial assets that reflects the business model in which they are managed and their cash flow characteristics.

Built upon this is a forward-looking expected credit loss model that will result in more timely recognition of loan losses and is a single model that is applicable to all financial instruments subject to impairment accounting. In addition, IFRS 9 addresses the so-called 'own credit' issue, whereby banks and others book gains through profit or loss as a result of the value of their own debt falling due to a decrease in credit worthiness when they have elected to measure that debt at fair value. The Standard also includes an improved hedge accounting model to better link the economics of risk management with its accounting treatment.

IFRS 10 - Consolidated Financial Statements

IFRS 10 was issued at 1 January 2013. The objective of this IFRS is to establish principles for the presentation and preparation of consolidated financial statements when an entity controls one or more other entities. To meet the objective, this IFRS: (a) requires an entity (the parent) that controls one or more other entities (subsidiaries) to present consolidated financial statements; (b) defines the principle of control, and establishes control as the basis for consolidation; (c) sets out how to apply the principle of control to identify whether an investor controls an investee and therefore must consolidate the investee; and (d) sets out the accounting requirements for the preparation of consolidated financial statements.

Consolidated financial statements are the financial statements of a group in which the assets, liabilities, equity, income, expenses and cash flows of the parent and its subsidiaries are presented as those of a single economic entity. The IFRS requires an entity that is a parent to present consolidated financial statements. The IFRS defines the principle of control and establishes control as the basis for determining which entities are consolidated in the consolidated financial statements.

When preparing consolidated financial statements, an entity must use uniform accounting policies for reporting like transactions and other events in similar circumstances. Intragroup balances and transactions must be eliminated. Non-controlling interests in subsidiaries must be presented in the consolidated statement of financial position within equity, separately from the equity of the owners of the parent.

IFRS 11 - Joint Arrangements

IFRS 11 was issued in May 2011. It establishes principles for the financial reporting by parties to a joint arrangement. IFRS 11 improves the accounting for joint arrangements by introducing a principle-based approach that requires a party to a joint arrangement to recognise its rights and obligations arising from the arrangement. Such a principle-based approach will provide users with greater clarity about an entity's involvement in its joint arrangements by increasing the verifiability, comparability and understandability of the reporting of these arrangements.

The disclosure requirements allow users to gain a better understanding of the nature, extent and financial effects of the activities that an entity carries out through joint arrangements. The disclosure requirements for joint arrangements have been placed in IFRS 12 Disclosure of Interests in Other Entities.

IFRS 12 - Disclosure of Interests in Other Entities

IFRS 12 applies to entities those have an interest in subsidiaries, joint arrangements, associates and unconsolidated structured entities.

IFRS 12 does not apply to: (a) Post-employment benefit plans or other long-term employee benefit plans to which IAS 19 Employee Benefits applies, (b) Separate financial statements, where IAS 27 Separate Financial Statements applies, (c) An interest held by an entity that participates in, but does not have joint control or significant influence over, a joint arrangement, and (d) Interests accounted for in accordance with IFRS 9 Financial Instruments, except for interests in an associate or joint venture measured at fair value as required by IAS 28 Investments in Associates and Joint Ventures.

IFRS 13 - Fair Value Measurement

IFRS 13 was issued at 1 January 2013. This IFRS (a) defines fair value; (b) sets out in a single IFRS a framework for measuring fair value; and (c) requires disclosures about fair value measurements.

The IFRS applies to IFRSs that require or permit fair value measurements or disclosures about fair value measurements (and measurements, such as fair value less costs to sell, based on fair value or disclosures about those measurements), except in specified circumstances.

A fair value measurement assumes that a financial or non-financial liability or an entity's own equity instrument (e.g. equity interests issued as consideration in a business combination) is transferred to a market participant at the measurement date.

The transfer of a liability or an entity's own equity instrument assumes the following: (a) 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. (b) 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.

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

Scope of the International Financial Reporting Standards

- a) IFRSs are not intended to be applied to immaterial items and they are not retrospective.
- b) Within each individual country local regulations govern, to a greater or lesser degree, the issue of financial statements.
- c) IFRSs concentrate on essentials and are designed not to be too complex; otherwise they would be impossible to apply on a worldwide basis.
- d) IFRSs do not override local regulations on financial statements

Advantages of the IFRS

- a) The world's economies are becoming more integrated and having one accounting system will make life a little less complicated for both the companies and the investors.
- b) As multinational businesses continue to grow and expand, a thorough knowledge of IFRS is now essential for internationally active, growing businesses.
- c) There seems to be worldwide consensus surrounding the need for one global set of high-quality accounting standards and that IFRS is currently best positioned to fulfil that need.
- d) In today's global economy the consistency of one reporting standard will make it more efficient for investors to research and compare financial statements globally and more effectively.
- e) IFRS adoption leads to higher market liquidity, more investment flows through foreign mutual funds, and more favourable terms in private debt contracting, greater analyst coverage, and lower stock return synchronicity.

Disadvantages of the IFRS

- a) Even if the IFRS is implemented, there would still be differences in financial reporting, and financial statements would not be "identical" because of the differences in national laws, economic conditions, and objectives.
- b) The environmental factors such as culture, language, and legal system affect how IFRS is applied.
- c) The differing backgrounds of the people in numerous countries applying IFRS means that interpretative differences will arise because of different historical practices.
- d) If some countries interpret the IFRS differently than other countries, the financial statements between those countries would not be comparable.

- e) The audit fees of public accounting firms increase after the transition to IFRS.
- f) The costs of application by companies, such as changing the internal systems to make it compatible with the new reporting standards, training costs and etc., are increased.
- g) It will take a substantial amount of time to convert to IFRS completely, depending on the size of the company.

Requirements of the IFRS

A complete set of financial statements, includes the following components, is required under IFRS:

- a) A Statement of Financial Position as at the end of the reporting period.
- b) A Statement of Profit or Loss and Other Comprehensive Income for the reporting period.
- c) A Statement of Changes in Equity (SOCE) for the reporting period.
- d) A Cash Flow Statement or Statement of Cash Flows for the reporting period.
- e) Notes comprising a summary of significant accounting policies and other explanatory information.
- f) A Statement of financial position at the beginning of the earliest comparative period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements.

Convergence between IFRSs and US GAAP

The IASB and the US Financial Accounting Standards Board (FASB) have been working together since 2002 to achieve convergence of IFRSs and US Generally Accepted Accounting Principles (GAAP). A common set of high quality global standards remains a priority of both the IASB and the FASB.

In September 2002 the IASB and the FASB agreed to work together, in consultation with other national and regional bodies, to remove the differences between international standards and US GAAP. This decision was embodied in a Memorandum of Understanding (MoU) between the boards known as the Norwalk Agreement. The boards' commitment was further strengthened in 2006 when the IASB and FASB set specific milestones to be reached by 2008.

In the light of progress achieved by the boards and other factors, the US Securities and Exchange Commission (SEC) removed in 2007 the requirement for non-US companies registered in the US to reconcile their financial reports with US GAAP if their accounts complied with IFRSs as issued by a proposed road map on adoption of IFRSs for domestic US companies.

In 2008 the two boards issued an update to the MoU, which identified a series of priorities and milestones, emphasising the goal of joint projects to produce common, principle based standards.

The Group of 20 Leaders (G20) called for standard setters to re-double their efforts to complete convergence in global accounting standards. Following this request, in November 2009 the IASB and FASB published a progress report describing and intensification of their work programme, including the hosting of monthly joint board meetings and to provide quarterly updates on their progress on convergence projects.

In April 2012 the IASB and FASB published a joint progress report in which they describe the progress made on financial instruments, including a joint expected loss impairment ('provisioning') approach and a more converged approach to classification and measurement.

In February 2013 the IASB and FASB published a high level update on the status and timeline of the remaining convergence projects. The report includes an update on the impairment phase of the joint project on financial instruments.

The listed companies of European Union State including UK, France and Germany, have adopted IFRS since 2005. The process of converging towards IFRS is still going on in India.

IFRS in India

IFRS convergence, in recent years, had gained momentum in this world. As the capital markets become increasingly global in nature, more and more investors see the need for a common set of accounting standards.

India being one of the global players, migration to IFRS will enable Indian entities to have access to international capital markets without having to go through the cumbersome conversion and filing process. It will lower the cost of raising funds, reduce accountants' fees and enable faster access to all major capital markets. Furthermore it will facilitate companies to set targets and milestones based on a global business environment rather than an inward perspective.

Furthermore, convergence to IFRS, by various group entities, will enable management to bring all components of the group into a single financial reporting platform. This will eliminate the need for multiple reports and significant adjustment for preparing consolidated financial statements or filing financial statements in different stock exchanges.

Benefits of IFRS over the Indian GAAP

The following are the reasons for adoption of IFRS inspite of Indian GAAP:

1. Improve transparency in accounting system.
2. Globally accepted.
3. New opportunity.
4. Allows exercise of professional judgement.
5. IFRS are increasingly being recognised as Global Reporting Standards for financial statements.
6. Indian GAAP is becoming rare because it has some limitations in comparison with IFRS.
7. As global capital markets become increasingly integrated, many countries are adopting IFRs.
8. More than 100 countries already permit the use of IFRS in their countries.

Benefits of IFRS in India

The following are the benefits to India by the implementation of IFRS:

1. It would benefit the economy by increasing the growth of international business.

2. It would encourage foreign investment which results in foreign capital inflows into the country.
3. It would reduce the cost of compliance.
4. IFRS would open many opportunities for the professionals to serve the international clients.

Challenges in implementation of IFRS in India

There are certain challenges in implementation of IFRS in India. They include:

1. Increase in cost initially due to dual reporting requirement, which entity might have to meet till the full convergence is achieved.
2. Current accounting framework in India is deeply affected by laws and regulations. It is required to make amendments in various laws and regulations.
3. All stakeholders, employees, auditors, regulators, tax authorities etc. would need to aware about IFRS. They need to be trained.
4. Organisations would incur additional costs for modifying their current accounting procedures for meeting the new disclosures and reporting requirements.

Comparison of IFRS with US GAAP and Indian GAAP

The following are the important similarities and differences between IFRS, US GAAP and Indian GAAP:

Sl. No.	Subject	IFRS	US GAAP	Indian GAAP
1.	Historical Cost	Generally uses historical cost, but intangible assets, property, plant and equipment (PPE) and investment property may be revalued to fair value.	No revaluation except for certain types of financial instruments.	Uses historical cost, but property, plant and equipment (PPE) may be revalued to fair value.
2.	First-time adoption of accounting frameworks	Full retrospective application of all IFRSs effective at the reporting date for an entity's first IFRS financial statements, with some optional exemptions and limited mandatory exceptions.	First-time adoption of US GAAP requires retrospective application.	Similar to US GAAP.
3.	Components of Financial Statements	Two years' consolidated balance sheets, income statements, cash flow statements, changes in equity and accounting policies and notes.	Similar to IFRS, except three years required for SEC registrants (public companies) for all statements except balance sheet	Single-entity parent company (standalone) two years' balance sheets, income statements, cash flow statements and

				accounting policies and notes.
4.	Balance Sheet	Does not prescribe a particular format. A liquidity presentation of assets and liabilities used instead of a current or non-current presentation, only when a liquidity presentation provides more relevant and reliable information.	Entities may present either a classified or non-classified balance sheet. Items on the face of balance sheet are generally presented in decreasing order of liquidity.	Accounting standards do not prescribe a particular format; certain items must be presented on the face of the balance sheet.
5.	Income Statement	Does not prescribe a standard format, although expenditure is presented in one of two formats (function or nature).	Present as either a single step or multiple step format. Expenditures are presented by function.	Does not prescribe a standard format; but certain income and expenditure items are disclosed in accordance with accounting standards and the Companies Act.
6.	Cash Flow Statements – Format and Method	Standard headings, but limited guidance on contents. Direct or indirect method is used.	Similar headings to IFRS, but more specific guidance for items included in each category. Direct or indirect method is used.	Similar to IFRS. However, indirect method is required for listed companies and direct method or insurance companies.
7.	Cash Flow Statements – Definition of Cash and cash equivalents	Cash includes cash equivalents with maturities of three months or less from the date of acquisition and may include bank overdrafts.	Similar to IFRS, except that bank overdrafts are excluded.	Similar to US GAAP.
8.	Revenue Recognition	Based on several criteria, which require the recognition of revenue when risks and rewards and control have been transferred and the revenue can be measured reliably.	Similar to IFRS in principle, based on four key criteria. Extensive detailed guidance exists for specific types of transactions.	Similar to IFRS conceptually, although several differences in detail.
9.	Depreciation	Associated on systematic basis to each accounting period over the useful life of the asset.	Similar to IFRS.	Similar to IFRS, except where the useful life is shorter as envisaged under the Companies Act or the relevant

				statute, the depreciation is computed by applying a higher rate.
10.	Property, Plant and Equipment (PPE)	Historical cost or revalued amounts are used. Regular valuations of entire classes of assets are required when revaluation option is chosen.	Historical cost is used; revaluations are not permitted.	Historical cost is used. Revaluations are permitted. However, no requirement on frequency of revaluation.
11.	Inventories	Carried at lower of cost and net realisable value. FIFO or weighted average method is used to determine cost. LIFO is prohibited.	Similar to IFRS; However, use of LIFO is permitted.	Similar to IFRS.
12.	Contingencies	Disclose unrecognised possible losses and probable gains.	Similar to IFRS.	Similar to IFRS, except that contingent gains are neither recognised nor disclosed.

REVIEW QUESTIONS

A. Short Answer Type questions

1. What do you mean by IFRS?
2. Write a note on IFRS Advisory Council.
3. What do you understand by IFRS Interpretations Committee?
4. Write a note on IFRS Foundation.
5. List any four IFRSs.

B. Essay Type Questions

1. Discuss the objectives and roles of IASB.
2. Write a note on scope, merits and demerits of IFRS.
3. Briefly explain any five IFRSs.
4. How can you distinguish the IFRS and US GAAP?
5. Give a note on IFRS in India.
6. Write an essay on convergence between IFRSs and US GAAP.

MODULE – 2

ACCOUNTING FOR GROUP COMPANIES (ACCOUNTS OF HOLDING COMPANIES)

LESSON 2

ACCOUNTS OF HOLDING COMPANIES

Holding Companies

A holding company is the company that holds either the whole of the share capital or a majority of the shares in one or more companies so as to have a controlling interest in such companies. Such other companies are known as subsidiary companies. Unlike in amalgamation or absorption, the subsidiary companies retain their identities because they do businesses in their own names.

Group of Companies

A Holding company together with its Subsidiaries can be called as the Group of companies.

Need for Group of Companies

The following are the advantages for a company to operate as a group:

1. *Decentralisation of financial risk:* If one entity fails, it does not affect the other companies in the group. The other companies can continue even if one or two companies in the group fail.
2. *Lawful obligation:* In some cases, the formation of a subsidiary company is a legal requirement.
3. *Diversification possible at lower cost:* One company acquires controlling interest of another company. It helps the company to diversify its business activities at least cost.

Legal Definition

Subsidiary Company– Sec 2(87) of the Companies Act 2013 defines a company. As per this section, a company shall be deemed to be a subsidiary company of another if and only if:

- (a) that other company controls the composition of its board of directors ; or
- (b) when the first mentioned company is another company, holds more than half in nominal value of its equity share capital; or
- (c) the company is a subsidiary of any company which is that other company's subsidiary.

A Subsidiary company may be either Wholly Owned Subsidiary or Partly Owned Subsidiary.

Accounts

The following documents in respect of a subsidiary or subsidiaries should be attached with the balance sheet of a holding company:

- (a) A copy of Balance Sheet of Subsidiary.
- (b) A copy of its Statement of Profit and Loss.
- (c) A copy of Report of its Board of Directors.
- (d) A copy of Report of its Auditors.
- (e) A Statement of Holding Company's interest in Subsidiary.

According to section 129(3) of the Companies Act 2013, a holding company shall prepare a consolidated financial statement of the company and of all the subsidiaries in the same form and manner as that of its own, which shall also be laid before the annual general meeting of the company along with the laying of its financial statements.

Consolidated Balance Sheet

In addition to the legal balance sheet as prescribed in Schedule III, the holding company may also publish a Consolidated Balance Sheet in which the assets and liabilities of all the subsidiaries are shown along with its own assets and liabilities as the Balance Sheet of a head office incorporates the assets and liabilities of its branches. By way of Consolidated Balance Sheet, the investments of the holding company in the subsidiary company are replaced by net assets.

Minority Interest

When some of the shares of the subsidiary company are held by outsiders (other than the holding company), their interest in the subsidiary company is called as Minority Interest in subsidiary company. The minority interest is shown on the liabilities side of the Balance Sheet of the holding company under the head 'Share Capital'. The minority interest can be calculated as follows:

Paid up value of shares held by outsiders	xxx
Add: Proportionate share of capital/ revenue profit and/or reserves	xxx
	xxx
Less: Proportionate share of capital/ revenue losses	xxx
Value of Minority Interest	xxx

If the preference shares are held by outsiders, paid up value of such shares together with dividend thereon (if there is profit) is added to the value of minority interest.

Cost of Control (Goodwill) or Capital Reserve

If the holding company purchases the shares of the subsidiary company at a price more than their paid up value, the excess is **cost of control or goodwill**, if there is no reserve or profit or loss balance in the subsidiary company on date of acquisition of shares of the subsidiary company.

If the shares are purchased at a price which is less than the paid up value of the shares, the difference is taken as **capital reserve or profit**.

The goodwill or cost of control is shown on the assets side and the capital reserve or profit is shown on the liabilities side in the Consolidated Balance Sheet.

Illustration 1: The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Sundry Assets	260000	240000
Shares of Rs. 10 each	400000	200000	Investments:		
Profit and Loss Account	80000	20000	20000 shares in S Ltd.	300000	
General Reserve	40000	16000			
Current Liabilities	40000	4000			
	560000	240000		560000	240000

H Ltd. acquired the shares of S Ltd. on 31st December 2014. Prepare the Consolidated Balance Sheet.

Solution:

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd. as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	400000
b. Reserves and Surplus	2	120000
Current Liabilities		
H Ltd. 40000		
S Ltd. 4000		44000
Total		564000
B. Assets		
Non-current Assets		

Fixed Assets		
Tangible Assets – Sundry Assets		
H Ltd.	260000	
S Ltd.	240000	500000
Intangible Assets – Goodwill		
		64000
Current Assets		
		Nil
Total		
		564000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 40000 Equity shares of Rs. 10 each	400000
2.	Reserves and Surplus General Reserve	40000
	P & L A/c	80000
		120000

Working Note:

Calculation of Goodwill or Cost of Control:

	Rs.	Rs.
Cost of Shares in S Ltd.		300000
Less: Face value of shares in S Ltd.	200000	
Profit and Loss Account	20000	
General Reserve	16000	236000
Goodwill or Cost of Control		64000

Illustration 2: The liabilities and assets of the holding company A Ltd. and its subsidiary B Ltd. as on 31st December 2014 are as follows:

Liabilities	A Ltd. Rs.	B Ltd. Rs.	Assets	A Ltd. Rs.	B Ltd. Rs.
Share Capital:			Sundry Assets	120000	72000
Shares of Re. 1 each	72000	36000	Investments:		
Profit and Loss Account	18000	12000	36000 shares in B Ltd.	45000	
General Reserve	12000	6000			
Current Liabilities	63000	18000			
	165000	72000		165000	72000

A Ltd. acquired the shares in B Ltd. on 31st December 2014. Prepare the Consolidated Balance Sheet.

Solution:

**Consolidated Balance Sheet of A Ltd. and its Subsidiary B Ltd.
as on 31st December 2014**

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	72000
b. Reserves and Surplus	2	39000
Current Liabilities		
A Ltd. 63000		
B Ltd. 18000		81000
Total		192000
B. Assets		
Non-current Assets		
Fixed Assets		
Tangible Assets – Sundry Assets		
A Ltd. 120000		
B Ltd. 72000		192000
Intangible Assets		Nil
Current Assets		Nil
Total		192000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 72000 Equity shares of Re. 1 each	72000
2.	Reserves and Surplus Capital Reserve General Reserve P & L A/c	9000 18000 12000 39000

Working Note:

Calculation of Capital Reserve:

	Rs.	Rs.
Cost of Shares in B Ltd.		45000
Less: Face value of shares in B Ltd.	36000	
Profit and Loss Account	12000	
General Reserve	6000	54000
Capital Reserve		9000

Illustration 3: The following are the liabilities and assets of the holding company P Ltd. and its subsidiary Q Ltd. as on 31st December 2014. P Ltd. acquired 12000 shares in Q Ltd on 31st December 2014. Prepare the Consolidated Balance Sheet.

Liabilities	P Ltd. Rs.	Q Ltd. Rs.	Assets	P Ltd. Rs.	Q Ltd. Rs.
Share Capital:			Sundry Assets	48000	24000
Shares of Re. 1 each	36000	15000	Investments:		
Sundry Liabilities	24000	9000	12000 shares in Q Ltd.	12000	
	60000	24000		60000	24000

Solution:

Share of holdings by P Ltd. in Q Ltd. = 12000 shares out of 15000 shares = 80%

Share of holdings by Outsiders in Q Ltd. = 3000 shares out of 15000 shares = 20%

Consolidated Balance Sheet of P Ltd. and its Subsidiary Q Ltd.

as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	36000
b. Reserves and Surplus		Nil
Minority Interest		3000
Current Liabilities		
P Ltd. 24000		
Q Ltd. 9000		
		33000
Total		72000
B. Assets		
Non-current Assets		
Fixed Assets		
Tangible Assets – Sundry Assets		
P Ltd. 48000		
Q Ltd. 24000		
		72000
Intangible Assets		Nil
Current Assets		Nil
Total		72000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 36000 Equity shares of Re. 1 each	36000

Working Note:

Calculation of Minority Interest = 3000 shares of Re. 1 each
= Rs. 3000

Pre-Acquisition Profits or Capital Profits

Any profit or reserve standing in the Balance Sheet of subsidiary company on the date of purchase of shares by holding company is called pre-acquisition profit or capital profit. The outsiders' share of such capital profit is added to the minority interest and the balance (to holding company) are shown as Capital Reserve or adjusted in Cost of Control or Goodwill and shown in the Consolidated Balance Sheet.

Any losses, share of loss of outsiders is deducted from the minority interest and the share of loss to the holding company is added to the Cost of Control or Goodwill or deducted from the Capital Reserve, and shown in the Consolidated Balance Sheet.

Post-Acquisition Profits or Revenue Profits

Profits of the subsidiary company made after the date of purchase of shares in the subsidiary company by the holding company are called as post-acquisition profits or revenue profits. The share of revenue profit of the holding company is added to the profit of the holding company. The share of profit due to the outsiders in the subsidiary company is added to the minority interest and shown in the Consolidated Balance Sheet.

- The date of purchase of shares in the subsidiary company by the holding company is the basis for determination of profit, whether it is Capital Profit or Revenue Profit.

Illustration 4: The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Sundry Assets	640000	480000
Shares of Rs. 10 each	800000	400000	Investments:		
Profit and Loss Account	80000	40000	32000 shares in S Ltd.		
Current Liabilities	80000	40000	@ Rs. 10 each	320000	
	960000	480000		960000	480000

H Ltd. acquired the shares in S Ltd. on 31st December 2014. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 32000 shares out of 40000 shares = 80%

Share of holdings by Outsiders in S Ltd. = 8000 shares out of 40000 shares = 20%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	800000
b. Reserves and Surplus	2	112000
Minority Interest		88000
Current Liabilities		
H Ltd. 80000		
S Ltd. 40000		120000
Total		1120000
B. Assets		
Non-current Assets		
Fixed Assets		
Tangible Assets – Sundry Assets		
H Ltd. 640000		
S Ltd. 480000		1120000
Intangible Assets		Nil
Current Assets		Nil
Total		1120000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital	
	Issued and Subscribed	
	80000 Equity shares of Rs. 10 each	800000
2.	Reserves and Surplus	
	Capital Reserve	32000
	P & L A/c	80000
		112000

Working Notes:

Calculation of Capital Profit:

Profit and Loss Account balance in S Ltd. = Rs. 40000

Share of capital profit due to H Ltd. = $40000 \times 80\%$ = Rs. 32000

Share of capital profit due to Outsiders in S Ltd. = $40000 \times 20\%$ = Rs. 8000

Calculation of Capital Reserve:

	Rs.	Rs.
Cost of Shares in S Ltd.		320000
Less: Face value of shares in S Ltd.	320000	
Capital Profit	32000	352000
Capital Reserve		32000

Calculation of Minority Interest:

	Rs.
Paid up value of Shares held by outsiders in S Ltd. (8000 x 10)	80000
Add: Share of capital profit due to Outsiders in S Ltd.	8000
Minority Interest	88000

Illustration 5: The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Fixed Assets	100000	60000
Equity Shares of Rs.10 Each	120000	50000	Current Assets	115000	20000
8% Preference Shares of Rs. 10 each	40000	10000	Cash and Bank	70000	10000
Profit and Loss Account	25000	10000			
Sundry Creditors	100000	20000			
	285000	90000		285000	90000

H Ltd. acquired 90% of the equity shares of S Ltd. at Rs. 15 per share on 1st January 2015. Prepare the Consolidated Balance Sheet as on 1st January 2015.

Solution:

Share of holdings by H Ltd. in S Ltd. = 90%

Share of holdings by Outsiders in S Ltd. = 10%

**Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 1st January 2015**

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	160000
b. Reserves and Surplus	2	25000
Minority Interest		16000
Current Liabilities – Sundry Creditors		

H Ltd.	100000		
S Ltd.	20000		120000
Total			321000
B. Assets			
Non-current Assets			
Fixed Assets			
Tangible Assets – Fixed Assets			
H Ltd.	100000		
S Ltd.	60000		160000
Intangible Assets - Goodwill			
			13500
Current Assets			
Cash & Bank			
H Ltd. (70000 – 67500)	2500		
S Ltd.	10000		12500
Other Current Assets			
H Ltd.	115000		
S Ltd.	20000		135000
Total			321000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital	
	Issued and Subscribed	
	12000 Equity shares of Rs. 10 each	120000
	4000, 8% Preference Shares of Rs. 10 each	40000
		160000
2.	Reserves and Surplus	
	Profit and Loss Account	25000

Working Notes:

Calculation of Capital Profit:

Profit and Loss Account balance in S Ltd. = Rs. 10000

Share of capital profit due to H Ltd. = $10000 \times 90\% = \text{Rs. } 9000$

Share of capital profit due to Outsiders in S Ltd. = $10000 \times 10\% = \text{Rs. } 1000$

Calculation of Goodwill:

	Rs.	Rs.
--	-----	-----

Cost of Shares in S Ltd. (5000x90%x15)		67500
Less: Face value of shares in S Ltd.	45000	
Capital Profit	9000	54000
Goodwill		13500

Calculation of Minority Interest:

	Rs.	Rs.
Paid up value of Shares held by outsiders in S Ltd. (5000x10%x10)		5000
Add: Share of capital profit due to Outsiders in S Ltd.	1000	
8% Preference Share Capital in S Ltd	10000	11000
Minority Interest		16000

Illustration 6: The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Sundry Assets	720000	756000
Shares of Rs. 10 each	1200000	600000	Investments:		
Profit and Loss Account	120000	48000	48000 shares in S Ltd.	780000	
General Reserve	120000	60000			
Current Liabilities	60000	48000			
	1500000	756000		1500000	756000

H Ltd. acquired shares in S Ltd. on 1st January 2014. On that date the Profit and Loss Account had a credit balance of Rs. 12000 and in Reserve Rs. 300. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 48000 shares out of 60000 shares = 80%

Share of holdings by Outsiders in S Ltd. = 12000 shares out of 60000 shares = 20%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	1200000
b. Reserves and Surplus	2	288000
Minority Interest		141600
Current Liabilities		
H Ltd. 60000		

S Ltd.	48000	108000
Total		1737600
B. Assets		
Non-current Assets		
Fixed Assets		
Tangible Assets – Sundry Assets		
H Ltd.	720000	
S Ltd.	756000	1476000
Intangible Assets - Goodwill		261600
Current Assets		Nil
Total		1737600

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 120000 Equity shares of Rs. 10 each	1200000
2.	Reserves and Surplus Profit and Loss Account: H Ltd. 120000 S Ltd. 28800 General Reserve: H Ltd. 120000 S Ltd. 19200	148800 139200 288000

Working Notes:

Calculation of Capital Profit in S Ltd.:

Profit and Loss Account balance on 01/01/2014	Rs. 12000
General Reserve	36000
Capital Profit	48000

Share of capital profit due to H Ltd. = $48000 \times 80\%$ = Rs. 38400

Share of capital profit due to Outsiders in S Ltd. = $48000 \times 20\%$ = Rs. 9600

Calculation of Revenue Profit:

(a) Profit and Loss Account (48000-32000) = Rs. 36000

H Ltd. = $36000 \times 80\%$ = Rs. 28800

Outsiders in S Ltd. = $36000 \times 20\%$ = Rs. 7200

(b) General Reserve (60000-36000) = 24000

H Ltd. = $24000 \times 80\%$ = Rs. 19200

Outsiders in S Ltd. = $24000 \times 20\%$ = Rs. 4800

Calculation of Goodwill:

	Rs.	Rs.
Cost of Shares in S Ltd.		780000
Less: Face value of shares in S Ltd.	480000	
Capital Profit	38400	518400
Goodwill		261600

Calculation of Minority Interest:

	Rs.	Rs.
Paid up value of Shares held by outsiders in S Ltd.		120000
Add: Share of capital profit due to Outsiders in S Ltd.	9600	
Share of revenue profit due to Outsiders in S Ltd (7200+4800)	12000	21600
Minority Interest		141600

Illustration 7: The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Sundry Assets	48000	30000
Shares of Re. 1 each	30000	15000	Investments:		
Profit and Loss Account	12000	5400	15000 shares in S Ltd.	18000	
General Reserve	15000	-----			
Current Liabilities	9000	9600			
	66000	30000		66000	30000

H Ltd. acquired the shares in S Ltd. on 30th June 2014. On 1st January 2014 the Balance Sheet of S Ltd. showed a loss of Rs. 9000, which was written off out of profit earned during the year 2014. Profits are assumed to accrue evenly throughout the year. Prepare the Consolidated Balance Sheet.

Solution:

**Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 31st December 2014**

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		

a. Share Capital		1	30000
b. Reserves and Surplus		2	34200
Current Liabilities			
H Ltd.	9000		
S Ltd.	9600		18600
Total			82800
B. Assets			
Non-current Assets			
Fixed Assets			
Tangible Assets – Sundry Assets			
H Ltd.	48000		
S Ltd.	30000		78000
Intangible Assets - Goodwill			4800
Current Assets			Nil
Total			82800

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 30000 Equity shares of Re. 1 each	30000
2.	Reserves and Surplus Profit and Loss Account: H Ltd. 12000 S Ltd. 7200 General Reserve	19200 15000 34200

Working Notes:

Calculation of Revenue Profit in S Ltd.:

Profit and Loss Account balance on 31 st Dec 2014	Rs. 5400
Add: Loss written off during the year 2014	9000
Total Profit in 2014	14400

Profit before 30th June 2014 (Capital Profit) = $14400 \times \frac{1}{2}$ = Rs. 7200

Profit after 30th June 2014 (Revenue Profit) = $14400 \times \frac{1}{2}$ = Rs. 7200

Calculation of Capital Profit:

	Rs.
Profit upto 30 th June 2014	7200
Less: Capital Loss on 1 st Jan 2014	9000
Net (Capital) Loss	1800

Calculation of Goodwill:

	Rs.
Cost of Shares in S Ltd.	18000
Less: Face value of shares in S Ltd.	15000
	3000
Add: Capital Loss	1800
Goodwill	4800

Elimination of Inter-company Transactions

While preparing Consolidated Balance Sheet, the inter-company transactions between the holding company and the subsidiary company should be eliminated. Such transactions may be as follows:

1. **Debtors and Creditors** - Goods sold on credit by the holding company to the subsidiary company or vice versa will appear as debtors in the balance sheet of the company selling goods and creditors in the balance sheet of the company purchasing goods.
2. **Bills of Exchange** - Bills drawn by one company and accepted by the other company are eliminated while preparing Consolidated Balance Sheet but bills discounted and endorsed will continue to appear as liability because the company, which has accepted such bills, will have to make the payment to an outsider (i.e. bank) on the due date.
3. **Loans and Advances** - Loans advanced by the holding company to the subsidiary company or vice versa appears as an asset in the balance sheet of the company which gives such loans and as a liability in the balance sheet of the company that takes these loans.
4. **Debentures** - Debentures issued by one company and held by the other company.

Illustration 8: The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st March 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Land and Building	150000	.....
Shares of Rs. 10 each	500000	125000	Plant and Machinery		
General Reserve	75000	25000	less depreciation	500000	.....
Profit and Loss Account (01/04/2013)	100000	50000	Furniture	22500	25000
Profit and Loss Account (31/03/2014)	125000	62500	Investments:		
Sundry Creditors	75000	75000	7500 shares in S Ltd.	162500	.....
Bills Payables	37500	.....	Stock	100000	187500
			Sundry Debtors	25000	70000
			Bills Receivables	.....	25000

Bank Overdraft	50000	.....	Bank Balance	.....	26250
			Cash in Hand	2500	3750
	962500	337500		962500	337500

H Ltd. acquired 7500 shares in S Ltd. on 1st October 2013. Bills Receivables held by S Ltd. are all accepted by H Ltd. A sum of Rs. 15000 owing by H Ltd. in respect of goods supplied by S Ltd. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 7500 shares out of 12500 shares = 60%

Share of holdings by Outsiders in S Ltd. = 5000 shares out of 12500 shares = 40%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.

as on 31st March 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	500000
b. Reserves and Surplus	2	318750
Minority Interest		105000
Current Liabilities		
a. Trade Payables	3	147500
b. Bank Overdraft		50000
Total		1121250
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	4	697500
b. Intangible - Goodwill		23750
Current Assets		
Stock:		
H Ltd.		100000
S Ltd.		187500
Sundry Debtors:		287500
H Ltd.		25000
S Ltd.		<u>70000</u>
		95000
Less: Inter-company debt		<u>15000</u>
Bills Receivables (25000 – 25000)		80000
Cash and Cash Equivalents	5	Nil
		32500
Total		1121250

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 50000 Shares of Rs. 10 each	500000
2.	Reserves and Surplus General Reserve P & L A/c	75000 243750 318750
3.	Trade Payables Sundry Creditors: H Ltd. 75000 S Ltd. 75000 150000 Less: Inter-company debt 15000 Bills Payables: H Ltd. 37500 Less: Inter-company acceptance 25000	135000 12500 147500
4.	Fixed Assets – Tangible Land & Building Plant & Machinery less depreciation Furniture: H Ltd. 22500 S Ltd. 25000	150000 500000 47500 697500
5.	Cash and Cash Equivalents Cash in Hand H Ltd. 2500 S Ltd. 3750 Bank Balance	6250 26250 32500

*Working Notes:**Calculation of Revenue Profit in S Ltd.:*

Profit and Loss Account (01/04/2013 to 31/03/2014)	Rs. 62500
Less: Capital Profit (upto 30/09/2013)	31250
Revenue Profit	31250

Share of revenue profit due to H Ltd. = $31250 \times 60\% = \text{Rs. } 18750$

Share of revenue profit due to Outsiders in S Ltd. = $31250 \times 40\% = \text{Rs. } 12500$

Calculation of Capital Profit in S Ltd.:

	Rs.
--	-----

Profit and Loss Account on 01/04/2013	50000
Add: $\frac{1}{2}$ of 62500 (01/04/2013 to 30/09/2013)	31250
General Reserve	25000
Capital Profit	106250

Share of capital profit due to H Ltd. = $106250 \times 60\% = \text{Rs. } 63750$

Share of capital profit due to Outsiders in S Ltd. = $106250 \times 40\% = \text{Rs. } 42500$

Calculation of Goodwill:

	Rs.	Rs.
Cost of Shares in S Ltd.		162500
Less: Face value of shares in S Ltd. (7500x10)	75000	
Capital Profit	63750	138750
Goodwill		23750

Calculation of Minority Interest:

	Rs.	Rs.
Paid up value of Shares held by outsiders in S Ltd. (5000x10)		50000
Add: Share of capital profit due to Outsiders in S Ltd.	42500	
Share of revenue profit due to Outsiders in S Ltd	12500	55000
Minority Interest		105000

Calculation of P & L A/c balance in Consolidated Balance Sheet:

Profit and Loss Account balance (100000+125000)	Rs.
Add: Revenue Profit of H Ltd. in S Ltd.	225000
P & L A/c Balance	18750
	243750

Unrealised Profit (Inter – company Stock)

If the goods sold at a profit by the subsidiary company to the holding company or by the holding company to the subsidiary company remain unsold at the end of the financial year, the profit charged by the company on unsold goods remains unrealised. In such a case, it is not proper to credit the Profit and Loss Account with such unrealised profit. Hence, a stock reserve is created and profit is reduced by the unrealised profit. While preparing Consolidated Balance Sheet, stock reserve will be deducted from stock.

Illustration 9: The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Buildings	112500	30000
Shares of Rs. 10 each	250000	75000	Plant and Machinery	87500	40000
Profit and Loss Account	75000	43750	Furniture	20000	7500
General Reserve	100000	31250	Investments:		
Sundry Creditors	25000	17500	5000 shares in S Ltd.	65000	

		Sundry Debtors	75000	42500
		Stock	80000	40000
		Cash	10000	7500
	450000	167500	450000	167500

Prepare the Consolidated Balance Sheet as on 31st December 2014, by considering the following information:

- (a) H Ltd. acquired the shares in S Ltd. on 1st January 2014 when balance of their Profit and Loss Account and General Reserve were Rs. 18750 and Rs. 20000 respectively.
- (b) Stock of Rs. 40000 held by S Ltd. includes Rs. 15000 of goods purchased from H Ltd, who has charged a profit @ 25% on cost.

Solution:

Share of holdings by H Ltd.in S Ltd. = 5000 shares out of 7500 shares = 2/3

Share of holdings by Outsiders in S Ltd. = 2500 shares out of 7500 shares = 1/3

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	250000
b. Reserves and Surplus	2	207000
Minority Interest		50000
Current Liabilities		
Sundry Creditors:		
H Ltd.		25000
S Ltd.		17500
		42500
Total		549500
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	3	297500
b. Intangible		Nil
Current Assets		
Stock:		
H Ltd.		80000
S Ltd.		40000
120000		
Less: Unrealised Profit (Stock Reserve)		3000
Sundry Debtors:		
H Ltd.		75000

S Ltd.	<u>42500</u>		117500
Cash and Cash Equivalents – Cash in Hand			
H Ltd.	10000		
S Ltd.	<u>7500</u>		17500
Total			549500

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 25000 Shares of Rs. 10 each	250000
2.	Reserves and Surplus Capital Reserve General Reserve P & L A/c	 10833 107500 88667
		207000
3.	Fixed Assets – Tangible Buildings: H Ltd. 112500 S Ltd. <u>30000</u> Plant & Machinery: H Ltd. 87500 S Ltd. <u>40000</u> Furniture: H Ltd. 20000 S Ltd. <u>7500</u>	 142500 127500 27500
		297500

Working Notes:

Calculation of Revenue Profit in S Ltd.:

(a) Profit and Loss Account (43750-18750) = Rs. 25000

H Ltd. = $25000 \times \frac{2}{3}$ = Rs. 16667Outsiders in S Ltd. = $25000 \times \frac{1}{3}$ = Rs. 8333

(b) General Reserve (31250-20000) = 11250

H Ltd. = $11250 \times \frac{2}{3}$ = Rs. 7500Outsiders in S Ltd. = $11250 \times \frac{1}{3}$ = Rs. 3750

Calculation of Capital Profit in S Ltd.:

	Rs.
Profit and Loss Account on 1 st January 2014	18750
General Reserve	20000
Capital Profit	38750

Share of capital profit due to H Ltd. = $38750 \times \frac{2}{3}$ = Rs. 25833

Share of capital profit due to Outsiders in S Ltd. = $38750 \times \frac{1}{3}$ = Rs. 12917

Calculation of Capital Reserve:

	Rs.	Rs.
Cost of Shares in S Ltd.		65000
Less: Face value of shares in S Ltd. (5000x10)	50000	
Capital Profit	25833	75833
Capital Reserve		10833

Calculation of Minority Interest:

	Rs.	Rs.
Paid up value of Shares held by outsiders in S Ltd. (2500x10)		25000
Add: Share of capital profit due to Outsiders in S Ltd.	12917	
Share of revenue profit due to Outsiders in S Ltd (8333+3750)	12083	25000
Minority Interest		50000

Calculation of P & L A/c balance in Consolidated Balance Sheet:

	Rs.
Profit and Loss Account balance of H Ltd.	75000
Add: P & L A/c balance of H Ltd. in S Ltd.	16667
	91667
Less: Unrealised Profit (15000 x 25/125)	3000
P & L A/c Balance	88667

Calculation of General Reserve balance in Consolidated Balance Sheet:

	Rs.
General Reserve balance of H Ltd.	100000
Add: General Reserve balance of H Ltd. in S Ltd.	7500
General Reserve Balance	107500

Issue of Bonus Shares

Sometimes, the bonus shares are issued by the subsidiary companies. It enhances the number of shares held by the holding company. Its treatment depends upon the sources (Capital Profit or Revenue Profit) from which bonus shares are issued out.

- a) **Bonus shares issued out of Capital Profit or Pre-acquisition Profit** – No effect in the accounting treatment in the books of accounts.

- b) **Bonus shares issued out of Current Profit or Post-acquisition Profit** – The holding company's share in the current profit of the subsidiary company should be calculated after making proper adjustments for bonus issue. Ultimately, it reduces the amount of holding company's share in the post-acquisition profit. It will affect the cost of goodwill.

Illustration 10: The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital: 120000 Shares of Rs. 5 each	600000	.....	Fixed Assets	506000	256000
16000 Shares of Rs. 10 each	.....	160000	Investments: 12000 shares in S Ltd.	200000	.....
Capital Reserve	.....	68000	Stock	60000	20000
General Reserve	40000	20000	Bills Receivables (Incl. 2000 from S Ltd.)	4000	.....
Profit and Loss Account	100000	20000	Bank	40000	34000
Bills Payables (Incl. Rs. 2000 to H Ltd.)	.....	7000			
Sundry Creditors	70000	35000			
	810000	310000		810000	310000

H Ltd. acquired 12000 shares of Rs. 10 each from S Ltd. on 31st December 2014. S Ltd. utilised a part of its Capital Reserve to make bonus issue of one share for every four shares held. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 12000 shares out of 16000 shares = 75%

Share of holdings by Outsiders in S Ltd. = 4000 shares out of 16000 shares = 25%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	600000
b. Reserves and Surplus	2	141000
Minority Interest		67000
Current Liabilities		
Sundry Creditors:		
H Ltd.		70000
S Ltd.		35000
Bills Payables (7000 – 2000)		105000
Total		918000
B. Assets		

Non-current Assets			
Fixed Assets			
a. Tangible		3	762000
b. Intangible			Nil
Current Assets			
Stock:			
H Ltd.	60000		
S Ltd.	<u>20000</u>		80000
Bills Receivables (4000 – 2000)			2000
Cash and Cash Equivalents – Bank			
H Ltd.	40000		
S Ltd.	<u>34000</u>		74000
Total			918000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 12000 Shares of Rs. 5 each	600000
2.	Reserves and Surplus Capital Reserve General Reserve P & L A/c	1000 40000 100000
		141000
3.	Fixed Assets – Tangible H Ltd. 506000 S Ltd. <u>256000</u>	762000

Working Notes:

Revenue Profit in S Ltd. = Nil

Calculation of Capital Profit in S Ltd.:

	Rs.
Profit and Loss Account	20000
General Reserve	20000
Capital Reserve	68000
Capital Profit	108000

Share of capital profit due to H Ltd. = $108000 \times 75\% = \text{Rs. } 81000$

Share of capital profit due to Outsiders in S Ltd. = $108000 \times 25\% = \text{Rs. } 27000$

Calculation of Capital Reserve:

	Rs.	Rs.
Cost of Shares in S Ltd.		200000
Less: Face value of shares in S Ltd. (12000x10)	120000	

Capital Profit	81000	201000
Capital Reserve		1000

Calculation of Minority Interest:

Paid up value of Shares held by outsiders in S Ltd. (4000x10)	Rs. 40000
Add: Share of capital profit due to Outsiders in S Ltd.	27000
Minority Interest	67000

Illustration 11: The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Fixed Assets	262500	75000
Shares of Rs.10 each	300000	75000	Investments:		
General Reserve	75000	30000	6000 shares in S Ltd.	75000	
Profit and Loss Account	37500	22500	Current Assets	112500	60000
Sundry Creditors	37500	7500			
	450000	135000		450000	135000

On the date of acquisition of shares in S Ltd. by H Ltd., S Ltd. had a General Reserve balance of Rs. 30000. S Ltd. capitalised Rs. 15000 out of profit earned after acquisition of its shares by H Ltd. by making a bonus issue of one share for every five shares held. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 6000 shares out of 7500 shares = 80%

Share of holdings by Outsiders in S Ltd. = 1500 shares out of 7500 shares = 20%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.

as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	300000
b. Reserves and Surplus	2	139500
Minority Interest		25500
Current Liabilities		
Sundry Creditors:		
H Ltd.		37500
S Ltd.		7500
		45000
Total		510000

B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	3	337500
b. Intangible		Nil
Current Assets		
H Ltd.	112500	
S Ltd.	<u>60000</u>	172500
Total		510000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 30000 Shares of Rs. 10 each	300000
2.	Reserves and Surplus Capital Reserve General Reserve P & L A/c (37500 + 6000)	21000 75000 43500
		139500
3.	Fixed Assets – Tangible H Ltd. 262500 S Ltd. <u>75000</u>	337500

Working Notes:

Calculation of Revenue Profit in S Ltd.:

	Rs.
Profit and Loss Account balance for the year 2014	22500
Less: Bonus Shares	15000
Revenue Profit	7500

Share of revenue profit due to H Ltd. = $7500 \times 80\% = \text{Rs. } 6000$ Share of revenue profit due to Outsiders in S Ltd. = $7500 \times 20\% = \text{Rs. } 1500$

Calculation of Capital Profit in S Ltd.:

General Reserve = 30000

Share of capital profit due to H Ltd. = $30000 \times 80\% = \text{Rs. } 24000$ Share of capital profit due to Outsiders in S Ltd. = $30000 \times 20\% = \text{Rs. } 6000$

Calculation of Capital Reserve:

	Rs.	Rs.
Cost of Shares in S Ltd.		75000
Less: Face value of shares in S Ltd. (60000x10)	60000	
Capital Profit	24000	

Face value of Bonus Shares (15000x80%)	12000	96000
Capital Reserve		21000

Calculation of Minority Interest:

Paid up value of Shares held by outsiders in S Ltd. (1500x10)		Rs. 15000
Add: Share of revenue profit due to Outsiders in S Ltd.	1500	
Share of capital profit due to Outsiders in S Ltd.	6000	
Bonus Shares (15000x20%)	3000	10500
Minority Interest		25500

Revaluation of Assets and Liabilities

Sometimes, the fixed assets of subsidiary companies are revalued at the time of acquisition of shares. There may be revaluation profit (capital profit) or revaluation loss (capital loss). The share of holding company in revaluation profit is added to the capital reserve or deducted from the goodwill. The revaluation profit due to outsiders in subsidiary company is added to the minority interest. The share of revaluation loss to holding company is added to goodwill or deducted from capital reserve. The share of revaluation loss to outsiders in subsidiary company is deducted from minority interest. Depreciation is also adjusted while calculating the revenue profit in subsidiary company.

Illustration 12: The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Investments:		
Shares of Re. 1 each	300000	240000	192000 shares in S Ltd.	210000	
General Reserve	120000	60000	Other Assets	300000	330000
Profit and Loss Account (Current Year)	90000	30000			
	510000	330000		510000	330000

On 1st January 2014 H Ltd. acquired the shares in S Ltd., when the plant and machinery were revalued to Rs. 240000 from Rs. 180000 and furniture of S Ltd. was revalued to Rs. 45000 from Rs. 60000. Depreciation for plant and machinery and furniture are 10% and 5% respectively. The balance sheet of S Ltd. showed these assets on revalued basis. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 192000 shares out of 240000 shares = 80%

Share of holdings by Outsiders in S Ltd. = 48000 shares out of 240000 shares = 20%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.

as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	300000

b. Reserves and Surplus	2	295800
Minority Interest		73950
Current Liabilities		Nil
Total		669750
B. Assets		
Non-current Assets		
Fixed Assets	3	258750
a. Tangible		Nil
b. Intangible		
Current Assets		
Other Assets		411000
Total		669750

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital	
	Issued and Subscribed	
	300000 Shares of Re. 1 each	300000
2.	Reserves and Surplus	
	Capital Reserve	66000
	General Reserve	120000
	P & L A/c (90000+19800)	109800
		295800
3.	Fixed Assets – Tangible	
	Plant and Machinery of S Ltd.	216000
	Furniture of S Ltd.	<u>42750</u>
		258750

Working Notes:

Calculation of Profit on Revaluation:

	Rs.
Plant and Machinery (240000-180000)	60000
Less: Loss on Furniture (60000-45000)	15000
Total Profit on Revaluation	45000

Calculation of Revenue Profit in S Ltd.:

	Rs.
Profit and Loss Account balance for the year	30000
Less: Additional Depreciation on Plant & Machinery (60000x10%)	6000

Add: Excess Depreciation on Furniture (15000x5%)	24000
<i>Revenue Profit</i>	750
	24750

Share of revenue profit due to H Ltd. = $24750 \times 80\%$ = Rs. 19800

Share of revenue profit due to Outsiders in S Ltd. = $24750 \times 20\%$ = Rs. 4950

Calculation of Capital Profit in S Ltd.:

General Reserve	Rs.
Revaluation Profit	60000
<i>Capital Profit</i>	45000
	105000

Share of capital profit due to H Ltd. = $105000 \times 80\%$ = Rs. 84000

Share of capital profit due to Outsiders in S Ltd. = $105000 \times 20\%$ = Rs. 21000

Calculation of Capital Reserve:

Cost of Shares in S Ltd.	Rs.	Rs.
Less: Face value of shares in S Ltd.	192000	210000
Capital Profit	84000	276000
<i>Capital Reserve</i>		66000

Calculation of Minority Interest:

Paid up value of Shares held by outsiders in S Ltd.		Rs.
Add: Share of revenue profit due to Outsiders in S Ltd.	21000	48000
Share of capital profit due to Outsiders in S Ltd.	4950	25950
<i>Minority Interest</i>		73950

Plant and Machinery of S Ltd.:

Plant and Machinery	Rs.
Less: Depreciation @ 10%	240000
Plant and Machinery of S Ltd.	24000
	216000

Furniture of S Ltd.:

Furniture	Rs.
	45000

Less: Depreciation @ 5%		2250
Furniture of S Ltd.		42750
Other Assets in Consolidated Balance Sheet:		
Total Other Assets as per Balance Sheet		Rs. 330000
Less: Plant and Machinery (180000 – Depn. 18000)	162000	
Furniture (60000 – Depn. 3000)	57000	219000
Other Assets		73950

Debentures of the Subsidiary Company

Sometimes, the holding company takes the investment in debentures of the subsidiary company. It shows under the head 'Investments' in the Balance Sheet of the holding company. If there is any difference between the costs and paid up value of debentures, adjusted against the cost of control or goodwill. If there is any debenture interest, it will also be adjusted.

Preference Shares in Subsidiary Company

- Preference Shares held by the Holding Company** – The accounting treatment is the same as in the case of holdings of equity shares. Dividend accrued after the acquisition is taken as revenue profit.
- Preference Shares held by the Outsiders in the Subsidiary Company** – The share holdings by the outsiders are included in the minority interest by the amount of paid up value of shares held (including arrears of dividend accrued to the date of consolidation). If the balance sheet of the subsidiary company shows debit balance of profit and loss account, preference shareholders are not required to bear the proportionate loss and the whole loss should be borne by the equity shareholders.

Illustration 13: The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Fixed Assets	1000000	150000
12500 Equity Shares of Rs. 100 each	1250000		Investments:		
12500 Equity Shares of Rs. 10 each		125000	10000 Equity Shares in S Ltd.	125000	
6250, 8% Preference Shares of Rs. 10 each		62500	Current Assets	312500	81250
General Reserve	125000	25000			
Sundry Creditors	62500	12500			
Dividend due on Preference Shares		6250			
	1437500	231250		1437500	231250

S Ltd. had Rs. 18750 in general reserve as on the date of acquisition on 1st January 2014. No dividend has been declared by S Ltd. in 2014. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 10000 shares out of 12500 shares = 80%

Share of holdings by Outsiders in S Ltd. = 2500 shares out of 12500 shares = 20%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.

as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	1250000
b. Reserves and Surplus	2	130000
Minority Interest		98750
Current Liabilities		
Sundry Creditors:		
H Ltd.		62500
S Ltd.		12500
		75000
Total		1553750
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	3	1150000
b. Intangible - Goodwill		10000
Current Assets		
H Ltd.		312500
S Ltd.		81250
		393750
Total		1553750

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital	
	Issued and Subscribed	
	12500 Equity Shares of Rs. 100 each	1250000
2.	Reserves and Surplus	
	General Reserve (125000+5000)	130000
3.	Fixed Assets – Tangible	
	H Ltd.	1000000
	S Ltd.	150000
		1150000

Working Notes:

Revenue Profit in S Ltd.:

 General Reserve = 25000-18750

 = Rs. 6250

Share of revenue profit due to H Ltd. = 6250x80% = Rs. 5000

Share of revenue profit due to Outsiders in S Ltd. = $6250 \times 20\% = \text{Rs. } 1250$

Capital Profit in S Ltd.:

General Reserve = 18750

Share of capital profit due to H Ltd. = $18750 \times 80\% = \text{Rs. } 15000$

Share of capital profit due to Outsiders in S Ltd. = $18750 \times 20\% = \text{Rs. } 3750$

Calculation of Goodwill:

	Rs.	Rs.
Cost of Shares in S Ltd.		125000
Less: Face value of shares in S Ltd. (10000x10)	100000	
Capital Profit	15000	115000
Goodwill		10000

Calculation of Minority Interest:

		Rs.
Paid up value of Shares held by outsiders in S Ltd. (2500x10)		25000
Add: 8% Preference Shares	62500	
Share of revenue profit due to Outsiders in S Ltd.	1250	
Share of capital profit due to Outsiders in S Ltd.	3750	
Dividend to Preference Shares	6250	73750
Minority Interest		98750

Illustration 14: The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Fixed Assets	375000	210000
60000 Equity Shares of Rs. 10 each	600000		Investments:		
7500 Equity Shares of Rs. 10 each		75000	Shares in S Ltd.	150000	
7500, 8% Preference Shares of Rs. 10 each		75000	Sundry Debtors	135000	15000
General Reserve (on 01/01/2014)	75000	45000	Bank	90000	15000
Profit and Loss Account	30000	15000			
Sundry Creditors	30000	30000			
Bank Overdraft	15000				
	750000	240000		750000	240000

On 1st January 2014 H Ltd. acquired 80% of both the equity shares and preference shares at a total cost of Rs. 150000. S Ltd. had a profit of Rs. 7500 in profit and loss account on 1st January 2014. Dividend for the year 2014 is still to be paid. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 80%

Share of holdings by Outsiders in S Ltd. = 20%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	600000
b. Reserves and Surplus	2	123000
Minority Interest		42000
Current Liabilities		
Sundry Creditors:		
H Ltd. 30000		
S Ltd. 30000		60000
Bank Overdraft		15000
Total		840000
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	3	585000
b. Intangible		Nil
Current Assets		
Sundry Debtors:		
H Ltd. 135000		
S Ltd. 15000		150000
Cash and Cash Equivalents – Bank:		
H Ltd. 90000		
S Ltd. 15000		105000
Total		840000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 60000 Equity Shares of Rs. 10 each	600000
2.	Reserves and Surplus Capital Reserve General Reserve P & L A/c	12000 75000 36000 123000
3.	Fixed Assets – Tangible H Ltd. 375000 S Ltd. 210000	585000

Working Notes:**Calculation of Revenue Profit in S Ltd.:**

	Rs.
Profit and Loss Account (15000-7500)	7500
Less: Preference Share Dividend (75000x8%)	6000
Revenue Profit	1500

Share of revenue profit due to H Ltd. = $1500 \times 80\% = \text{Rs. } 1200$

Share of revenue profit due to Outsiders in S Ltd. = $1500 \times 20\% = \text{Rs. } 300$

Calculation of Capital Profit in S Ltd.:

	Rs.
General Reserve	45000
P & L Account	7500
Capital Profit	52500

Share of capital profit due to H Ltd. = $52500 \times 80\% = \text{Rs. } 42000$

Share of capital profit due to Outsiders in S Ltd. = $52500 \times 20\% = \text{Rs. } 10500$

Calculation of Capital Reserve:

	Rs.	Rs.
Cost of Shares in S Ltd.		150000
Less: Face value of equity shares in S Ltd. (75000x80%)	60000	
Face value of preference shares in S Ltd. (75000x80%)	60000	
Capital Profit	42000	162000
Capital Reserve		12000

Calculation of Minority Interest:

	Rs.	Rs.
Paid up value of Shares held by outsiders in S Ltd.:		
Equity Shares (75000x20%)	15000	
Preference Shares (75000x20%)	15000	30000
Add: Share of revenue profit due to Outsiders in S Ltd.	300	
Share of capital profit due to Outsiders in S Ltd.	10500	
Dividend for Preference Shares (6000x20%)	1200	12000
Minority Interest		42000

Treatment of Dividend declared by Subsidiary Company

The dividend declared by the subsidiary can be taken in the financial statements as follows:

- a) **Dividend paid out of Pre-acquisition Profit** – Holding company's share of dividend is to be deducted or added from goodwill or to capital reserve. No adjustment is required in minority interest. The same amount is to be deducted from the profit and loss account in the consolidated balance sheet which appears in liabilities side.
- b) **Dividend paid out of Post-acquisition Profit** – If the dividend is declared by the subsidiary company from current profit and received by the holding company, and then it should be credited to the profit and loss account of the holding company.

Illustration 15: The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Fixed Assets	240000	320000
24000 Equity Shares of Rs. 10 each	240000		Investments:		
20000 Equity Shares of Rs. 10 each		200000	16000 Equity Shares in S Ltd.	208000	
General Reserve (on 01/01/2014)	48000	40000	Current Assets	16000	64000
Profit and Loss Account:					
Balance on 01/01/2014	16000	32000			
Balance for 2014	120000	80000			
Sundry Creditors	40000	32000			
	464000	384000		464000	384000

H Ltd. acquired 16000 shares of Rs. 10 each on 30th June 2014 for Rs. 208000 in S Ltd. H Ltd. received 10% dividend for the year 2013 and it was credited to the profit and loss account of the holding company. Prepare the Consolidated Balance Sheet.

Solution:

Share of holdings by H Ltd. in S Ltd. = 16000 shares out of 20000 shares = 80%

Share of holdings by Outsiders in S Ltd. = 4000 shares out of 20000 shares = 20%

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd.
as on 31st December 2014

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	240000
b. Reserves and Surplus	2	257600
Minority Interest		70400
Current Liabilities		
Sundry Creditors:		
H Ltd. 40000		

S Ltd.	32000		72000
Total			640000
B. Assets			
Non-current Assets			
Fixed Assets			
a. Tangible		3	560000
b. Intangible			Nil
Current Assets			
H Ltd.	16000		
S Ltd.	64000		80000
Total			640000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 24000 Equity Shares of Rs. 10 each	240000
2.	Reserves and Surplus Capital Reserve General Reserve P & L A/c	57600 48000 152000 257600
3.	Fixed Assets – Tangible H Ltd. 240000 S Ltd. 320000	560000

Working Notes:

Revenue Profit in S Ltd.:

Profit and Loss Account (80000-40000) = 40000

Share of revenue profit due to H Ltd. = 40000x80% = Rs. 32000

Share of revenue profit due to Outsiders in S Ltd. = 40000x20% = Rs. 8000

Calculation of Capital Profit in S Ltd.:

	Rs.
General Reserve on 01/01/2014	40000
P & L Account balance on 01/01/2014	32000
P & L Account for 2014	40000
Capital Profit	112000

Share of capital profit due to H Ltd. = 112000x80% = Rs. 89600

Share of capital profit due to Outsiders in S Ltd. = $112000 \times 20\% = \text{Rs. } 22400$

Calculation of Capital Reserve:

	Rs.	Rs.
Cost of Shares in S Ltd.		208000
Less: Face value of shares in S Ltd. (16000x10)	160000	
Capital Profit	89600	
Dividend (16000x10x10%)	16000	265600
<i>Capital Reserve</i>		57600

Calculation of Minority Interest:

		Rs.
Paid up value of Shares held by outsiders in S Ltd.:		40000
Add: Share of revenue profit due to Outsiders in S Ltd.	8000	
Share of capital profit due to Outsiders in S Ltd.	22400	30400
<i>Minority Interest</i>		70400

Calculation of Profit and Loss Account Balance in Consolidated Balance Sheet:

	Rs.
P & L Account of H Ltd. on 01/01/2014	16000
P & L Account for 2014	120000
Revenue Profit	32000
	168000
Less: Dividend (16000x10x10%)	16000
<i>Profit and Loss Account Balance in Consolidated Balance Sheet</i>	152000

REVIEW QUESTIONS

A. Short Answer Type questions

- Define a holding company.
- Define a subsidiary company.
- What is a Consolidated Balance Sheet?
- What do you mean by Minority Interest?
- What do you mean by Pre-Acquisition Profits?
- What is meant by Post-Acquisition Profit?

B. Short Essay Type Questions

- How would you ascertain the amount of minority interest?
- Explain the treatment of debentures of the subsidiary company in consolidated balance sheet.

C. Essay Type Questions

- Briefly explain the procedures to be followed in consolidation of accounts.
- Write notes on the following terms:
 - Cost of Control
 - Minority Interest
 - Pre-Acquisition Profits
 - Post-Acquisition Profit

D. Practical Problems

- The following are the liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Fixed Assets	20000	12000
Equity Shares of Rs.10 Each	24000	10000	Current Assets	23000	4000
8% Preference Shares of Rs. 10 each	8000	2000	Cash and Bank	14000	2000
Profit and Loss Account	5000	2000			
Sundry Creditors	20000	4000			
	57000	18000		57000	18000

H Ltd. acquired 90% of the equity shares of S Ltd. at Rs. 15 per share on 1st January 2015. Prepare the Consolidated Balance Sheet as on 1st January 2015.
(Answer: Goodwill – Rs. 2700; Minority Interest – Rs. 3200; Consolidated Balance Sheet Total – Rs. 64200).

- The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Sundry Assets	120000	126000
Shares of Rs. 10 each	200000	100000	Investments:		
Profit and Loss Account	20000	8000	8000 shares in S Ltd.	130000	
General Reserve	20000	10000			
Current Liabilities	10000	8000			
	250000	126000		250000	126000

H Ltd. acquired shares in S Ltd. on 1st January 2014. On that date the Profit and Loss Account had a credit balance of Rs. 2000 and in Reserve Rs. 6000. Prepare the Consolidated Balance Sheet.

(Answer: Capital Profit – Rs. 8000; Revenue Profit – Rs. 10000; Goodwill – Rs. 43600; Minority Interest – Rs. 23600; Consolidated Balance Sheet Total – Rs. 289600).

3. The liabilities and assets of the holding company H Ltd. and its subsidiary S Ltd. as on 31st December 2014 are as follows:

Liabilities	H Ltd. Rs.	S Ltd. Rs.	Assets	H Ltd. Rs.	S Ltd. Rs.
Share Capital:			Fixed Assets	126500	64000
30000 Shares of Rs. 5 each	150000	.....	Investments:		
4000 Shares of Rs. 10 each	.....	40000	3000 shares in S Ltd.	50000	.....
Capital Reserve	.....	17000	Stock	15000	5000
General Reserve	10000	5000	Bills Receivables (Incl. 500 from S Ltd.)	1000	.....
Profit and Loss Account	25000	5000	Bank	10000	8500
Bills Payables (Incl. Rs. 500 to H Ltd.)	.....	1750			
Sundry Creditors	17500	8750			
	202500	77500		202500	77500

H Ltd. acquired 3000 shares of Rs. 10 each from S Ltd. on 31st December 2014. S Ltd. utilised a part of its Capital Reserve to make bonus issue of one share for every four shares held. Prepare the Consolidated Balance Sheet.

(Answer: Capital Profit – Rs. 17000; Revenue Profit – Nil; Capital Reserve – Rs. 250; Minority Interest – Rs. 16750; Consolidated Balance Sheet Total – Rs. 229500).

MODULE – 3

ACCOUNTING FOR CORPORATE RESTRUCTURING

- AMALGAMATION
- INTERNAL RECONSTRUCTION
- LIQUIDATION OF COMPANIES

LESSON 3

AMALGAMATION OF COMPANIES

Introduction

There are many forms of business combinations to obtain the economies of scale, to increase production or to avoid the cut throat competition. They are amalgamation, absorption, internal reconstruction etc.

The term amalgamation is used when two or more existing companies go into liquidation and a new company is formed to take over the business of liquidated companies. In absorption, absorption is used when an existing company takes over the business of other companies which go into liquidation. In external reconstruction, one existing company goes into liquidation and a new company is formed to take over the former company.

Definitions as per Accounting Standard 14 (AS-14)

- a. **Amalgamation** – means an amalgamation pursuant to the provisions of the Companies Act 1956 or any other statute which may be applicable to companies.
- b. **Transferor Company** – means the company which is amalgamated.
- c. **Transferee Company** – means the company to which a transferor company is amalgamated.
- d. **Reserve** – means the portion of earnings, receipts or other surpluses (whether capital or revenue) appropriated by the management for a purpose other than provision for depreciation or diminution in the value of assets or known liability.

Types of Amalgamation

As per AS-14 there are two types of amalgamation: (1) Amalgamation in the nature of merger and (2) Amalgamation in the nature of purchase.

Amalgamation in the nature of Merger (Pooling Interest Method)

An amalgamation should be considered to be an amalgamation in the nature of merge when all the following conditions are satisfied:

- a. All the assets and liabilities of the Transferor Company or companies before amalgamation should become the assets and liabilities of the transferee company.
- b. Shareholders holding not less than 90% of the face value of the equity shares of the Transferor Company (excluding the proportion held by the transferee company) should become the shareholders of the transferee company.
- c. The consideration payable to the above mentioned shareholders should be discharged by the transferee company by the issue of the equity shares and cash can be payable in respect of fractional shares.
- d. The business of the Transferor Company/ companies is intended to be carried on by the transferee company.
- e. No adjustment is intended to be made to the book values of the assets and liabilities of the Transferor Company/ companies when they are incorporated in the financial statements of the transferee company except to ensure uniformity of accounting policies.

Amalgamation in the nature of purchase

An amalgamation should be considered to be an amalgamation in the nature of purchase, when any one or more of the conditions specified for amalgamation in the nature of merger is not satisfied.

Difference between Amalgamation in the nature of merger and Amalgamation in the nature of purchase

Merger	Purchase
1. There is a genuine pooling of assets and liabilities of the transferor companies as well as the share holders' interest. As such the shareholders of all the transferor companies continue to have substantial or proportionate share in the equity or management of Transferee Company.	1. One company acquires another. As a consequence, the shareholders of the transferor company normally do not continue to have a proportionate share in the equity management of the transferee company.
2. Assets, liabilities and reserves of the transferor company are recorded by the transferee company at their book values.	2. Assets, liabilities and reserves of the transferor company are recorded by the transferee company either at book value or at values revised on the basis of their fair values.
3. The balance of P&L A/c of the transferor company aggregated with the balance of the P&L A/c of the transferee company.	3. The balance of P&L A/c of the transferor company is not included in the books of the transferee company.
4. All reserves whether capital or revenue of Transferor Company are merged into the reserves of Transferee Company.	4. Only statutory reserves of Transferor Company are taken in the books of Transferee Company in order to preserve

	their identity.
5. It is always intended to continue the business of transferor company.	5. It may not be intended to continue the business of Transferor Company.
6. All the assets of Transferor Company become the assets of the transferee company.	6. All the assets of transferor company may or may not become the assets of the transferee company.
7. Purchase consideration is usually valued at the par value of the shares issued.	7. Purchase consideration is usually valued at the market price of the shares issued.

Purchase Consideration

Purchase consideration is the amount which is paid by the transferee company for the purchase the business of Transferor Company. As per AS-14, consideration for amalgamation means the aggregate of shares and other securities issued and the payment made in the form of cash or other assets by the transferee company to the shareholders of the transferor company. Purchase consideration does not include any payment to outsiders including debenture holders. The purchase consideration may be calculated in the following ways:

1. **Lump Sum Method:** When the transferee company agrees to pay a fixed sum to the transferor company, it is called lump sum payment of purchase consideration. For example, X Ltd purchases the business of Y Ltd for a consideration of 1000000.
2. **Net Worth (Net Assets) Method:** Under this method, the net worth of the assets taken over by the transferee company is taken as purchase consideration.

Here, Purchase consideration = Assets taken over at agreed values – Liabilities taken over at agreed values.

The following points are noted while calculating purchase consideration under his method:

- a. Cash balance is usually included in assets. But if it is not taken over, it will not be included.
- b. Fictitious assets should never be added.
- c. Accumulated profits and reserves should not be considered.
- d. The term 'liabilities' include all liabilities to third parties. But 'trade liabilities' include only trade creditors and bills payable.
- e. The term 'businesses' will always mean both the assets and liabilities.

Illustration 1: The following are the liabilities and assetsof Amrita Ltd

Liabilities	Rs.	Assets	Rs.
Share capital	60000	Goodwill	28000
Debentures	10000	Land & building	16000
Sundry creditors	6000	Plant & Machinery	28000
General reserve	4000	Stock	16000
Profit & Loss A/c	20000	Debtors	8000
		Cash	2000
		Preliminary expenses	2000
	100000		100000

Bangalore Ltd takes over the business of Amrita Ltd. the value agreed for various assets are: Goodwill Rs.22000, Land & Building Rs.25000, Plant and Machinery Rs.24000, Stock Rs.13000 and Debtors Rs.8000. Bangalore Ltd does not take over cash but agrees to assume the liability of sundry creditors at Rs.5000. Calculate the purchase consideration.

Solution:
Calculation of purchase consideration

Assets taken over:

Building	22000
Machinery	25000
	24000
	13000
	8000
	<u>92000</u>

Liabilities taken over:

Creditors	5000
Shares	<u>10000</u>
Consideration	<u>15000</u>
	<u>77000</u>

Asset method: Under this method, purchase consideration is the aggregate of all assets in the form of cash, shares, securities etc. to the shareholders of the transferor company by the transferee company. The following points are considered while calculating purchase consideration under this method:

Assets and liabilities taken over by the transferee company are not considered.

Purchase consideration includes the payments to shareholders only.

Payments made by the transferee company to some other party on behalf of the transferor company are to be ignored.

Question 2: The liabilities and assets of Jay Ltd as on 31 March 2015 is as follows:

Liabilities	Rs.	Assets	Rs.
Reserve	200000	Goodwill	40000
Share A/c	35000	Land & building	90000
Shares	20000	Plant & Machinery	75000
Debtors	50000	Stock	52000
	25000	Debtors	58000
		Cash	15000
	<u>330000</u>		<u>330000</u>

It decides to amalgamate into a new company New Ltd which will take over the assets and liabilities of Jay Ltd in the term that holders of each share of Rs.10 in the company will receive one share of Rs.10 each, Rs.5 paid up and Rs.4 in cash. The liquidation expense of Rs.10000 is met by New Ltd. calculate purchase consideration.

Calculation of purchase consideration

Share of Rs.10 each will get one share of Rs. 10 each Rs.5 paid up =	100000
Equity share will get Rs.4 in cash (2000x4)	= 80000
Purchase consideration	= <u>180000</u>

Liquidation expense is not included in purchase consideration)

Share exchange or Intrinsic value Method: Under this method purchase consideration is calculated on the basis of intrinsic value of shares. The intrinsic value of a share is calculated by dividing the net assets available for equity shareholders by the number of shares. This value determines the ratio of exchange of the shares between the transferee and transferor companies.

Accounting procedure of amalgamation, absorption and external reconstruction

Calculation of purchase consideration.

Accounting of discharge of purchase consideration.

Transfer to the books of transferor companies.

Opening entries in the books of purchasing or Transferee Company.

Accounting entries in the books of Transferor Company

- To P&L A/c
- To preliminary expenses
- To Discount/ expense on issue of shares/ debentures
- 12. For closing Realisation A/c:
 - a. For loss on realisation (if debit > credit).
 - Equity shareholders A/c Dr
 - To Realisation A/c
 - b. For profit on realisation (if credit > debit).
 - Realisation A/c Dr
 - To Equity shareholders A/c
- 13. For payment to equity shareholders:
 - Equity shareholders A/c Dr
 - To Equity shares in Transferee company A/c
 - To Cash/ Bank A/c (if any)

After payment to equity shareholders, all the accounts in the books of Transferor Company will be closed.

Accounting entries in the books of Transferee Company (Amalgamation in the nature of purchase)

- 1. For purchase consideration due and assets and liabilities taken over:
 - Assets A/c Dr (At revised, otherwise at book value)
 - Goodwill A/c Dr (if credit > debit)
 - To Liabilities A/c (At revised, otherwise at book value)
 - To Liquidator of transferor company (purchase consideration)
 - To Capital reserve (if debit > credit)
- 2. For payment of purchase consideration:
 - Liquidator of transferor company A/c Dr
 - To Share capital A/c
 - To Debenture A/c
 - To Bank A/c

(Note: if shares are issued at premium, security premium A/c is credited with premium. If shares are issued at discount, discount on issue of shares A/c is debited with discount).

- 3. For payment of liquidation expenses by transferee company:
 - Goodwill/ Capital reserve/ P&L A/c Dr
 - To Cash/ Bank A/c
- 4. For payment of formation expenses:
 - Preliminary expenses A/c Dr
 - To Cash/ Bank A/c
- 5. If there are both Goodwill and Capital reserve A/c, Goodwill may be set off against Capital reserve:
 - Capital Reserve A/c Dr
 - To Goodwill A/c
- 6. If any liability (including debenture) is discharged by transferee company:
 - Liability A/c Dr (Amount payable)
 - To Share capital/ Debenture/ Bank A/c
- 7. To record Statutory Reserves of transferor company:
 - Amalgamation Adjustment A/c Dr

To Statutory Reserve A/c

(Note: Amalgamation adjustment A/c is shown on the assets side of the company's Balance Sheet).

Illustration 3: X Ltd acquired the business of Y Ltd on 31 March 2015 for a purchase consideration of Rs. 55000 to be paid by fully paid equity shares of Rs.10 each. The liabilities and assets of both the companies on the date of acquisition were as follows:

Liabilities	X Ltd Rs.	Y Ltd Rs.	Assets	X Ltd Rs.	Y Ltd Rs.
Equity shares of Rs.10 each	55000	32500	Land & Building	21500	13500
10 % Preference shares of Rs.10 each	.....	6000	Plant & Machinery	40000	25000
General Reserve	17000	11000	Furniture	7500	5000
Development Allowance			Investment	12500	8000
Reserve	.....	4000	Inventories	25000	22500
P&L A/c	7000	5000	Sundry Debtors	8500	5000
Work men Compensation Fund	3000	1500	Cash & Bank	3000	1500
10% Debentures	20000	10000	Advance Tax	3500	3000
Fixed Deposit(unsecured)	7500	5000			
Sundry creditors	5000	5500			
Bills Payable	3000	.....		
Provision for tax	4000	3000			
	121500	83500		121500	83500

Debenture holders of Y Ltd will be issued equity shares in X Ltd. Journalise the transactions in the books of X Ltd and the Balance sheet after amalgamation assuming that the amalgamation is in the nature of purchase. Also give journal entries in the books of the transferor company to close the books.

Solution:

In the books of Y Ltd (Transferor company)
Closing entries

		Rs.	Rs.
Realisation A/c	Dr	83500	
To Land & Building A/c			13500
To Plant & Machinery A/c			25000
To Furniture A/c			5000
To Investment A/c			8000
To Inventories A/c			22500
To Sundry Debtors A/c			5000
To Cash & Bank A/c			1500
To Advance Tax A/c			3000
(transfer of various assets to Realisation A/c)			
10% Debentures A/c	Dr	10000	
Fixed Deposit A/c	Dr	5000	
Sundry creditors A/c	Dr	5500	
Provision for tax A/c	Dr	3000	
To Realisation A/c			23500
(transfer of various liabilities to Realisation A/c)			

X Ltd A/c	Dr	55000	55000
To Realisation A/c (purchase consideration due from X Ltd)			
Equity Shares in X Ltd A/c	Dr	55000	55000
To X Ltd A/c (purchase consideration received)			
10% Preference share capital A/c	Dr	6000	6000
To Preference shareholders A/c (amount payable to Preference shareholders)			
Preference shareholders A/c	Dr	6000	6000
To Equity Shares in X Ltd A/c (distribution of equity shares received from X Ltd)			
Equity share capital A/c	Dr	32500	
General reserve A/c	Dr	11000	
Development Allowance reserve A/c	Dr	4000	
P&L A/c	Dr	5000	
Workmen compensation Fund A/c	Dr	1500	
To equity shareholders A/c (transfer of equity shareholders' funds)			54000
Equity shareholders A/c	Dr	5000	5000
To Realisation A/c (transfer of loss on realisation)			
Equity shareholders A/c	Dr	49000	49000
To Equity shares in X Ltd A/c (distribution of equity shares received from X Ltd)			

Realisation A/c

	Rs.		Rs.
To Land & Building A/c	13500	By 10% Debentures A/c	10000
To Plant & Machinery A/c	25000	By Fixed Deposit A/c	5000
To Furniture A/c	5000	By Sundry creditors A/c	5500
To Investment A/c	8000	By Provision for tax A/c	3000
To Inventories A/c	22500	By X Ltd (PC)A/c	55000
To Sundry Debtors A/c	5000	By Equity shareholders A/c	5000
To Cash & Bank A/c	1500	(Realisation loss)-Bal. figure	
To Advance Tax A/c	3000		
	83500		83500

X Ltd A/c

	Rs.		Rs.
To Realisation A/c	55000	By Equity shares in X Ltd. A/c	55000
	55000		55000

Preference shareholders A/c

	Rs.		Rs.
--	-----	--	-----

To Equity shares in X Ltd A/c	6000	By 10%Preference share capital A/c	6000
	6000		6000

Equity shareholders A/c

To Realisation A/c (loss)	Rs. 5000	By Equity share capital A/c	Rs. 32500
To Equity shares in X Ltd. A/c	49000	By General reserve A/c	11000
		By Development Allowance reserve	4000
		By P&L A/c	5000
		By Workmen compensation Fund A/c	1500
	54000		54000

Opening Entries in the books of X Ltd (Transferee Company)

		Rs.	Rs.
Land & Building A/c	Dr	13500	
Plant & Machinery A/c	Dr	25000	
Furniture A/c	Dr	5000	
Investment A/c	Dr	8000	
Inventories A/c	Dr	22500	
Sundry Debtors A/c	Dr	5000	
Cash & Bank A/c	Dr	1500	
Advance Tax A/c	Dr	3000	
To 10% Debentures A/c			10000
To Fixed Deposit A/c			5000
To Sundry creditors A/c			5500
To Provision for tax A/c			3000
To Liquidators of Y Ltd A/c			55000
To Capital Reserve (Bal. figure)			5000
(purchase consideration due and assets and liabilities taken over)			
Liquidators of Y Ltd A/c	Dr	55000	
To Equity Share capital A/c			55000
(payment of purchase consideration in equity shares)			
10% Debentures A/c	Dr	10000	
To Equity Share capital A/c			10000
(discharge of debentures by issuing equity shares)			
Amalgamation Adjustment A/c	Dr	5500	
To Development Allowance reserve A/c			4000
To Workmen compensation Fund A/c			1500
(statutory reserves incorporated)			

Balance Sheet of X Ltd (after amalgamation) as on 1 April 2015

Particulars	Note No.	Amount (Rs.)
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A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	120000
b. Reserves and Surplus	2	37500
Non-current Liabilities :		
a. Long term borrowings	3	20000
b. Fixed Deposit	4	12500
Current Liabilities		
a. Trade Payables	5	13500
b. Provisions for Tax		7000
Total		210500
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	6	112500
b. Non-current Investment		20500
c. Other non-current Assets	7	5500
Current Assets		
Inventories		47500
Trade Receivables		13500
Cash and Cash Equivalents: Cash and Bank		4500
Advance Tax		6500
Total		210500

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital	
	Issued and Subscribed	
	12000 Equity shares of Rs. 10 each	120000
2.	Reserves and Surplus	
	Capital Reserve	5000
	General Reserve	17000
	Development Allowance Reserve	4000
	Workmen compensation Fund	4500
	P & L A/c	7000
		37500
3.	Long Term Borrowings	
	10% Debentures	20000
4.	Fixed Deposits	12500
5.	Trade Payables	
	Sundry Creditors	10500
	Bills Payables	3000
		13500
6.	Fixed Assets – Tangible	
	Land & Building	35000

	Plant & Machinery	65000
	Furniture	12500
		112500
7.	Other Non-current Assets	
	Amalgamation Adjustment Account	5500

Accounting entries in the books of Transferee Company (Amalgamation in the nature of merger)

- a) For purchase consideration due and assets and liabilities taken over:

Assets A/c

Dr (Individually at book value)

To Liabilities A/c (Individually at book value)

To Reserves of Transferor Company A/c

To P & L A/c

To Liquidator of transferor company A/c (purchase consideration)

(Note: The difference between debit and credit is adjusted in the reserves of Transferee Company)

- b) For payment of purchase consideration:

Liquidator of transferor company A/c

Dr

To Share capital A/c

To Debenture A/c

To Bank A/c

(Note: if shares are issued at premium, security premium A/c is credited with premium. If shares are issued at discount, discount on issue of shares A/c is debited with discount).

- c) Payment of liquidation expense by transferee company:

General Reserve/ P & L A/c

Dr

To Cash/ Bank A/c

- d) For the payment of formation expenses:

Preliminary expenses A/c

Dr

To Cash/ Bank A/c

Illustration 4: The following is the summarized statement of liabilities and assets of Moon Ltd as on 31 March 2015.

	Rs.		Rs.
<i>Share Capital</i>		<i>Fixed Assets</i>	
40000 equity shares of Rs.10		Land & Building	200000
Each	400000	Plant & Machinery	100000
<i>Reserves & Surplus</i>		Furniture	80000
Capital Reserve A/c	180000	<i>Investments</i>	-----
P & L A/c	60000	<i>Current Assets</i>	
<i>Secured Loan</i>		Stock	40000
10% Debentures	200000	Sundry Debtors	60000
<i>Current liabilities & Provisions</i>		Bank	300000
Sundry creditors	20000	Cash	80000
	860000		860000

On 1 April 2015 Sun Ltd took over the business of Moon Ltd as per the following terms:

- Debentures are to be discharged at a premium of 5% in Sun Ltd.
- Creditors are to be paid off by Sun Ltd.
- Sun Ltd will issue 5 equity shares of Rs.10 each at a market value of Rs.11 for every 4 equity shares of Moon Ltd.
- Cost of liquidation Rs.10000 is to be paid by Sun Ltd.

Close the books of Moon Ltd and pass opening entries in the books of Sun Ltd assuming that the amalgamation is in the nature of merger.

Solution:

$$\text{Purchase consideration (in Equity shares)} = 40000 \times 5/4 \times 11 = \underline{\text{Rs.550000}}$$

In the books of Moon Ltd.

Realisation A/c

	Rs.		Rs.
To Land & Building A/c	200000	By 10% Debentures A/c	200000
To Plant & Machinery A/c	100000	By Sundry creditors A/c	20000
To Furniture A/c	80000	By Sun Ltd (PC)	550000
To Stock A/c	40000	By Equity shareholders A/c	90000
To Sundry Debtors A/c	60000	(realisation loss)-Bal. figure	
To Bank A/c	300000		
To Cash A/c	80000		
	860000		860000

Sun Ltd A/c

	Rs.		Rs.
To Realisation A/c	550000	By Equity shares in Sun Ltd.	550000
	550000		550000

Equity Shares in Sun Ltd A/c

	Rs.		Rs.
To Sun Ltd A/c	550000	By Equity shareholders A/c	550000

	550000		550000
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Equity shareholders A/c

	Rs.		Rs.
To Realisation A/c (loss)	90000	By Equity share capital A/c	400000
To Equity shares in Sun Ltd.	550000	By Capital Reserve A/c	180000
		By P&L A/c	60000
	640000		640000

Entries In the books of Sun Ltd

		Rs.	Rs.
Land & Building A/c	Dr	200000	
Plant & Machinery A/c	Dr	100000	
Furniture A/c	Dr	80000	
Stock A/c	Dr	40000	
Sundry Debtors A/c	Dr	60000	
Bank A/c	Dr	300000	
Cash A/c	Dr	80000	
To 10% Debentures A/c			200000
To Sundry creditors A/c			20000
To Capital Reserve A/c (Bal. Fig)			30000
To P & L A/c			60000
To Liquidators of Moon Ltd A/c (purchase consideration due and assets and liabilities taken over)			550000
Liquidators of Moon Ltd A/c	Dr	550000	
To Equity Share capital A/c			500000
To Security Premium A/c			50000
(payment of purchase consideration in 50000 equity shares of Rs.10 at Rs.11)			
10% Debentures A/c	Dr	200000	
Premium on Redemption of Debentures A/c	Dr	10000	
To Bank A/c			210000
(discharge of debentures at 5% premium)			
Capital Reserve A/c	Dr	10000	
To Premium on Redemption of Debentures A/c			10000
(Premium on Redemption of Debentures adjusted)			
Capital Reserve A/c	Dr	10000	
To Bank A/c			10000
(liquidation expenses paid)			

Working Note:

Calculation of Reserve:

Purchase consideration

550000

Less: Share capital of Moon Ltd	<u>400000</u>
Difference to be adjusted	<u>150000</u>
Capital Reserve in Moon Ltd	180000
Less: Difference adjusted	<u>150000</u>
Balance of Capital Reserve	<u>30000</u>

Illustration 5: A Ltd acquired the business of B Ltd on 31 March 2015 for a purchase consideration of Rs.2,50,00,000 to be paid by fully paid equity shares of Rs.10 each. The liabilities and assets of two companies on the date of acquisition were as follows:

Liabilities	A Ltd (Rs.)	B Ltd (Rs.)	Assets	A Ltd (Rs.)	B Ltd (Rs.)
Equity shares of Rs.10 each fully paid	25000000	15000000	Land & Building	12000000	8000000
General Reserve	12000000	1800000	Plant & Machinery	20000000	18000000
Development Rebate Reserve	1000000	3700000	Furniture	1000000	2000000
P&L A/c	1000000	5300000	Stock	5500000	4000000
Workmen Compensation Fund	1500000	2400000	Sundry Debtors	4500000	4000000
Current Liabilities	4500000	9500000	Bank	2000000	1700000
	<u>45000000</u>	<u>37700000</u>		<u>45000000</u>	<u>37700000</u>

Pass the necessary journal entries in the books of A Ltd when amalgamation is in the nature of (i) merger and (ii) purchase. Also prepare the Balance sheet of A Ltd after amalgamation assuming that Development Rebate Reserve and Workmen Compensation Fund of B Ltd are required to be continued in the books of A Ltd.

Solution:

When amalgamation is in the nature of merger:

Entries in the books of A Ltd.

2015	Land & Building A/c	Dr	8000000	
Mar 31	Plant & Machinery A/c	Dr	18000000	
	Furniture A/c	Dr	2000000	
	Stock A/c	Dr	4000000	
	Sundry Debtors A/c	Dr	4000000	
	Bank A/c	Dr	1700000	
	General Reserve A/c (Bal. Fig)	Dr	2900000	
	To Development Rebate Reserve A/c			3700000
	To Workmen Compensation Fund A/c			2400000
	To Current liabilities A/c			9500000
	To Liquidators of B Ltd A/c			25000000
	(purchase consideration due and assets and			

liabilities taken over)		25000000	
Liquidators of B Ltd A/c To Equity Share capital A/c (payment of purchase consideration in equity shares)	Dr		25000000

Balance Sheet of A Ltd as on 1 April 2015 (after amalgamation)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	50000000
b. Reserves and Surplus	2	18700000
Non-current Liabilities		Nil
Current Liabilities		14000000
Total		82700000
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	3	61000000
b. Non-current Investment		Nil
c. Other non-current Assets		Nil
Current Assets		
Stock		9500000
Sundry Debtors		8500000
Bank		3700000
Total		82700000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 5000000 Equity shares of Rs. 10 each, fully paid	50000000
2.	Reserves and Surplus General Reserve Development Rebate Reserve Workmen compensation Fund P & L A/c	9100000 4700000 3900000 1000000 18700000
3.	Fixed Assets – Tangible Land & Building Plant & Machinery Furniture	20000000 38000000 3000000 61000000

When amalgamation is in the nature of purchase:

Entries in the books of A Ltd.

			Rs.	Rs.
2015	Land & Building A/c	Dr	8000000	
Mar 31	Plant & Machinery A/c	Dr	18000000	
	Furniture A/c	Dr	2000000	
	Stock A/c	Dr	4000000	
	Sundry Debtors A/c	Dr	4000000	
	Bank A/c	Dr	1700000	
	To Current liabilities A/c			9500000
	To Liquidators of B Ltd A/c			25000000
	To Capital Reserve A/c (Bal. Fig)			3200000
	(purchase consideration due and assets and liabilities taken over)			
	Liquidators of B Ltd A/c	Dr	25000000	
	To Equity Share capital A/c			25000000
	(payment of purchase consideration in equity shares)			
	Amalgamation Adjustment A/c	Dr	6100000	
	To Development Rebate Reserve A/c			3700000
	To Workmen compensation Fund A/c			2400000
	(statutory reserves incorporated)			

Balance Sheet of A Ltd as on 1 April 2015 (after amalgamation)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	50000000
b. Reserves and Surplus	2	24800000
Non-current Liabilities		Nil
Current Liabilities		14000000
Total		88800000
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	3	61000000
b. Non-current Investment		Nil
c. Other non-current Assets	4	6100000
Current Assets		
Stock		9500000
Sundry Debtors		8500000
Bank		3700000
Total		88800000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 5000000 Equity shares of Rs. 10 each, fully paid	50000000
2.	Reserves and Surplus Capital Reserve General Reserve Development Rebate Reserve Workmen compensation Fund P & L A/c	 3200000 12000000 4700000 3900000 1000000 24800000
3.	Fixed Assets – Tangible Land & Building Plant & Machinery Furniture	 20000000 38000000 3000000 61000000
4.	Other Non-current Assets Amalgamation Adjustment Account	 6100000

Illustration 6: A Ltd agrees to sell their undertaking to B Ltd on the following terms. B Ltd will pay them Rs.600000 in cash and allot them two fully paid share of Rs.6 each (market value Rs. 7.50 per share) in exchange of every three shares in their own company. The liabilities and assets of A Ltd on the date of amalgamation stood as follows:

	Rs.		Rs.
<i>Share Capital</i> 120000 equity shares of Rs.6 Each, fully paid up	720000	<i>Fixed Assets</i> Land & Building Plant & Machinery	450000 218700
<i>Reserves & Surplus</i> General Reserve P & L A/c	360000 34168	<i>Current Assets</i> Stock Sundry Debtors	273450 229500
Creditors	132500	Bank Cash	74280 738
	1246668		1246668

A Ltd will pay their liquidation expenses themselves which amounted to Rs.9000. close the books of A Ltd and give opening entries in the books of B Ltd assuming that the amalgamation is in the nature of purchase.

Solution:

Calculation of purchase consideration

In cash	600000
In equity shares (120000x2/3x7.50)	<u>600000</u>
Purchase Consideration	<u>1200000</u>

Closing entries in the books of A Ltd

		Rs.	Rs.
Realisation A/c	Dr	1246668	
To Land & Building A/c			450000
To Plant & Machinery A/c			218700
To Stock A/c			273450
To Sundry Debtors A/c			229500
To Bank A/c			74280
To Cash A/c			738
(transfer of various assets to Realisation A/c)			
Sundry creditors A/c	Dr	132500	
To Realisation A/c			132500
(transfer of sundry creditors to Realisation A/c)			
B Ltd A/c	Dr	1200000	
To Realisation A/c			1200000
(purchase consideration due from B Ltd)			
Cash A/c	Dr	600000	
Equity Shares in B Ltd A/c	Dr	600000	
To B Ltd A/c			1200000
(purchase consideration received)			
Equity share capital A/c	Dr	720000	
General reserve A/c		360000	
P&L A/c	Dr	34168	
To equity shareholders A/c			1114168
(transfer of equity shareholders' funds)			
Realisation A/c	Dr	9000	
To Cash A/c			9000
(liquidation expenses paid)			
Realisation A/c	Dr	76832	
To Equity shareholders A/c			76832
(transfer of profit on realisation)			
Equity shareholders A/c	Dr	1191000	
To Equity shares in B Ltd A/c			600000
To Cash A/c			591000
(distribution of equity shares and cash received)			

Opening entries in the books of B Ltd

		Rs.	Rs.
Land & Building A/c	Dr	450000	
Plant & Machinery A/c	Dr	218700	
Stock A/c	Dr	273450	
Sundry Debtors A/c	Dr	229500	
Bank A/c	Dr	74280	
Cash A/c	Dr	738	
Goodwill A/c (Bal. Fig)	Dr	85832	
To Sundry Creditors A/c			132500

Generally amalgamation or absorption takes place between companies having mutual transactions. One company may purchase goods on credit from the other. Sometimes, one company accepts the bills of exchange drawn by the other.

At the time of amalgamation or absorption, inter-company debts must be eliminated because after amalgamation or absorption both companies become one entity and nothing will be payable or receivables between them. The adjusting entry in the books of transferee company for the elimination is:

To Sundry Debtors A/c

Note: No adjusting entry is required in the books of transferor company.

There may be mutual acceptance of bills of exchange between the companies. For such mutual acceptance the following adjusting entry is passed in the books of transferee company:

To Bills Receivables A/c

Note: No adjusting entry is required in the books of transferor company.

Illustration 7: Super Star Ltd. is formed to take over Super Ltd. and Star Ltd. for Rs. 390000 and Rs. 260000 respectively. The purchase consideration is payable in fully paid equity shares of Rs. 10 each.

The liabilities and assets of the two companies are as follows:

Liabilities	Super Ltd (Rs.)	Star Ltd (Rs.)	Assets	Super Ltd (Rs.)	Star Ltd (Rs.)
Equity Share Capital	312000	234000	Land and Building	104000	65000
General Reserve	97500	13000	Stock	143000	96200
Sundry Creditors	78000	26000	Sundry Debtors	159900	83200
Bills Payable	32500	19500	Bills Receivable	70850	24180
			Cash at Bank	42250	23920
	520000	292500		520000	292500

Note: Bills discounted by Super Ltd. not yet matured Rs. 7150.

Additional Information:

- Sundry debtors of Star Ltd. include Rs. 24700 due from Super Ltd.
- Bills payables of Super Ltd. include Rs. 16250 acceptances in favour of Star Ltd. But bills receivable of Star Ltd. include Rs. 9100 accepted by Super Ltd.

Close the books of Super Ltd. and Star Ltd. and pass the acquisition entries in the books of Super Star Ltd. Also prepare the balance sheet of Super Star Ltd. (Amalgamation in the nature of purchase).

Solution:

Closing entries in the books of Super Ltd.

	Rs.	Rs.
Realisation A/c Dr	520000	
To Land & Building A/c		104000
To Stock A/c		143000
To Sundry Debtors A/c		159900
To Bills Receivable A/c		70850
To Cash at Bank A/c		42250
(transfer of various assets to Realisation A/c)		
Sundry creditors A/c Dr	78000	
Bills Payable A/c Dr	32500	
To Realisation A/c		110500
(transfer of sundry creditors to Realisation A/c)		
Super Star Ltd. A/c Dr	390000	
To Realisation A/c		390000
(Purchase consideration due from Super Star Ltd.)		
Equity Shares in Super Star Ltd. A/c Dr	390000	
To Super Star Ltd. A/c		390000
(purchase consideration received)		
Equity share capital A/c Dr	312000	
General reserve A/c Dr	97500	
To Equity shareholders A/c		409500
(transfer of equity shareholders' funds)		
Equity shareholders A/c Dr	19500	
To Realisation A/c		19500
(transfer of loss on Realisation)		

Equity shareholders A/c	Dr	390000	
To Equity shares in Super Star Ltd. A/c			390000
(distribution of equity shares received)			

Closing entries in the books of Star Ltd.

		Rs.	Rs.
Realisation A/c	Dr	292500	
To Land & Building A/c			65000
To Stock A/c			96200
To Sundry Debtors A/c			83200
To Bills Receivable A/c			24180
To Cash at Bank A/c			23920
(transfer of various assets to Realisation A/c)			
Sundry creditors A/c	Dr	26000	
Bills Payable A/c	Dr	19500	
To Realisation A/c			45500
(transfer of sundry creditors to Realisation A/c)			
Super Star Ltd. A/c	Dr	260000	
To Realisation A/c			260000
(Purchase consideration due from Super Star Ltd.)			
Equity Shares in Super Star Ltd. A/c	Dr	260000	
To Super Star Ltd. A/c			260000
(purchase consideration received)			
Equity share capital A/c	Dr	234000	
General reserve A/c	Dr	13000	
To Equity shareholders A/c			247000
(transfer of equity shareholders' funds)			
Realisation A/c Dr		13000	
To Equity shareholders A/c			13000
(transfer of profit on Realisation)			
Equity shareholders A/c	Dr	260000	
To Equity shares in Super Star Ltd. A/c			260000
(distribution of equity shares received)			

(ii) Opening entries in the books of Super Star Ltd.

		Rs.	Rs.
Land & Building A/c	Dr	104000	
Stock A/c	Dr	143000	
Sundry Debtors A/c	Dr	159900	
Bills Receivable A/c Dr		70850	
Cash at Bank A/c	Dr	42250	
To Sundry Creditors A/c			78000
To Bills Payable A/c			32500
To Liquidators of Super Ltd. A/c			390000
To Capital Reserve (Bal. Fig.)			19500

(purchase consideration due and assets and liabilities taken over)			
Liquidators of Super Ltd. A/c Dr To Equity Share capital A/c (payment of purchase consideration)		390000	390000
Land & Building A/c Dr	65000		
Stock A/c Dr	96200		
Sundry Debtors A/c Dr	83200		
Bills Receivable A/c Dr	24180		
Cash at Bank A/c Dr	23920		
Goodwill A/c (Bal. Fig.) Dr	13000		
To Sundry Creditors A/c			26000
To Bills Payable A/c			19500
To Liquidators of Star Ltd. A/c (purchase consideration due and assets and liabilities taken over)			260000
Liquidators of Star Ltd. A/c Dr To Equity Share capital A/c (payment of purchase consideration)	260000		260000
Sundry Creditors A/c Dr To Sundry Debtors A/c (mutual debt set-off)	24700		24700
Bills Payable A/c Dr To Bills Receivable A/c (mutual acceptance set-off)	9100		9100
Capital Reserve A/c Dr To Goodwill A/c (goodwill set-off against capital reserve)	13000		13000

Balance Sheet of Super Star Ltd. (after amalgamation)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	650000
b. Reserves and Surplus	2	6500
Non-current Liabilities		Nil
Current Liabilities		
Trade Payables	3	122200
Total		778700
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	4	169000
b. Non-current Investment		Nil

Notes to Accounts

Inter-company Stock

Goodwill or Capital Reserve A/c

Dr

To Stock A/c (with unrealized profit)

Liabilities	X Ltd (Rs.)	Y Ltd (Rs.)	Assets	X Ltd (Rs.)	Y Ltd (Rs.)
Equity Share Capital of Rs. 10 each	280000	140000	Fixed Assets	140000	98000
Profit & Loss Account	84000	56000	Stock	130200	42000
Sundry Creditors	105000	49000	Sundry Debtors	126000	70000
Bills Payable	21000	7000	Bills Receivable	65800	30800
			Bank	28000	11200

	490000	252000		490000	252000
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The purchase consideration is Rs. 224000 payable in equity shares of Rs. 10 each. The bills payables of X Ltd. include Rs. 11200 due to Y Ltd. and sundry debtors of X Ltd. include Rs. 21000 due from Y Ltd. The stock of X Ltd. includes Rs. 15400 worth of goods purchased from Y Ltd. on which Y Ltd. made a profit of 10% on cost and the stock of Y Ltd. includes Rs. 28000 worth of goods purchased from X Ltd. on which X Ltd. made a profit of 10% on sale price.

Pass journal entries in the books of both the companies and prepare the balance sheet of X Ltd. after absorption.

Solution:

Closing entries in the books of Y Ltd.

		Rs.	Rs.
Realisation A/c	Dr	252000	
To Fixed Assets A/c			98000
To Stock A/c			42000
To Sundry Debtors A/c			70000
To Bills Receivable A/c			30800
To Bank A/c			11200
(transfer of various assets to Realisation A/c)			
Sundry creditors A/c	Dr	49000	
Bills Payable A/c	Dr	7000	
To Realisation A/c			56000
(transfer of sundry creditors to Realisation A/c)			
X Ltd. A/c	Dr	224000	
To Realisation A/c			224000
(Purchase consideration due from X Ltd.)			
Equity Shares in X Ltd. A/c	Dr	224000	
To X Ltd.			224000
(purchase consideration received)			
Equity share capital A/c	Dr	140000	
P & L A/c	Dr	56000	
To Equity shareholders A/c			196000
(transfer of equity shareholders' funds)			
Realisation A/c	Dr	28000	
To Equity shareholders A/c			28000
(transfer of profit on Realisation)			
Equity shareholders A/c	Dr	224000	
To Equity shares in X Ltd. A/c			224000
(distribution of equity shares received)			

Opening entries in the books of X Ltd.

		Rs.	Rs.
Fixed Assets A/c	Dr	98000	
Stock A/c	Dr	42000	

Sundry Debtors A/c	Dr	70000	
Bills Receivable A/c	Dr	30800	
Bank A/c	Dr	11200	
Goodwill A/c (Bal. Fig.)	Dr	28000	
To Sundry Creditors A/c			49000
To Bills Payable A/c			7000
To Liquidators of Y Ltd. A/c			224000
(purchase consideration due and assets and liabilities taken over)			
Liquidators of Y Ltd. A/c	Dr	224000	
To Equity Share capital A/c			224000
(payment of purchase consideration)			
Sundry Creditors A/c	Dr	21000	
To Sundry Debtors A/c			21000
(mutual debt set-off)			
Bills Payable A/c	Dr	11200	
To Bills Receivable A/c			11200
(mutual acceptance set-off)			
Goodwill A/c	Dr	1400	
To Stock A/c (15400x10/110)			1400
(unrealized profit in stock purchased from Y Ltd. eliminated)			
Goodwill A/c	Dr	2800	
To Stock A/c (28000x10/100)			2800
(unrealized profit in stock sold to Y Ltd. eliminated)			

Balance Sheet of X Ltd. (after amalgamation)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	504000
b. Reserves and Surplus	2	84000
Non-current Liabilities		Nil
Current Liabilities		
Trade Payables	3	149800
Total		737800
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible	4	238000
b. Intangible - Goodwill		32200
Current Assets		
Stock (130200+42000-4200)		168000

Sundry Debtors (196000-21000)	175000
Bills Receivable (96600-11200)	85400
Bank (28000+11200)	39200
Total	737800

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 50400 Equity shares of Rs. 10 each, fully paid	504000
2.	Reserves and Surplus P & L A/c	84000
3.	Trade Payables Sundry Creditors (154000-21000) Bills Payables (28000-11200)	133000 16800
4.	Fixed Assets – Tangible (140000+98000)	149800
		238000

Inter – company Investments (Inter – company Holdings)

There are three situations:

1. Shares held by transferee company in transferor company.
2. Shares held by transferor company in transferee company.
3. Shares held by both the companies in each other.

Shares held by transferee company in transferor company

The following steps are involved:

- a) Calculate the purchase consideration as usual.
- b) The discharge of purchase consideration by the transferee company must be reduced in proportion to transferee company's holding in the transferor company.
- c) In the books of transferor company:
 - i. Show the entire purchase consideration as due.
 - ii. Record the actual discharge by transferee company (reduced by holdings of transferee company).
 - iii. Transfer the balance in transferee company account to the equity shareholders account by:

Equity Shareholders A/c	Dr
To Transferee Company A/c	
- d) In the books of transferee company:

- i. Transferee company's holding in transferor company represents investments in the books of transferee company.
- ii. While discharging purchase consideration debit liquidator's account and credit investments account, with value of discharge for the number of shares of transferor company, held by transferee company.
- iii. Transfer any balance in investment account to goodwill account or capital reserve as the case may be.

Illustration 9: Following are the liabilities and assets of A Ltd. and B Ltd. as on 31st March 2015.

Liabilities	A Ltd (Rs. in Lakhs)	B Ltd (Rs. in Lakhs)	Assets	A Ltd (Rs. in Lakhs)	B Ltd (Rs. in Lakhs)
40000 Equity Shares of Rs. 100 each	40		Goodwill		0.50
20000 Equity Shares of Rs. 50 each		10	Fixed Assets	30	3.50
General Reserve	30	5	Investments	5	
Current Liabilities	30	1	Current Assets	65	14.00
Provision for Tax		1			
Proposed Dividend		1			
	100	18		100	18

B Ltd. is to be amalgamated in the nature of purchase by A Ltd. on the following terms:

1. B Ltd. declares a dividend of 10% before absorption for the payment of which it is to retain sufficient amount of cash.
2. The net worth of B Ltd. is valued at Rs. 14.50 lakhs.
3. The purchase consideration is satisfied by the issue of fully paid-up shares of Rs. 100 each in A Ltd.

Following further information is also to be taken into consideration:

- a) A Ltd. holds 5000 shares of B Ltd. at a cost of Rs. 3 lakh.
- b) The stock of B Ltd. includes items valued at Rs. 1 lakh purchased from A Ltd. (cost to A Ltd. Rs. 0.75 lakh).
- c) The creditors of B Ltd. include Rs. 0.50 lakh due to A Ltd.
- d) A Ltd. takes fixed assets of B Ltd. in its books at Rs. 4.50 lakh.

Show ledger accounts in the books of B Ltd. to give effect to the above and make journal entries in the books of A Ltd. and also prepare the balance sheet of A Ltd. after completion of absorption.

Solution:

In the books of B Ltd.
Proposed Dividend Account

To Current Assets A/c	Rs. 100000	By Balance b/d	Rs. 100000
	100000		100000

Current Assets Account

To Balance b/d	Rs. 1400000	By Proposed Dividend A/c	Rs. 100000
		By Realisation A/c	1300000
	1400000		1400000

Realisation Account

To Goodwill	Rs. 50000	By Current Liabilities	Rs. 100000
To Fixed Assets	350000	By Provision for Tax	100000
To Current Assets	1300000	By A Ltd. (Purchase Consideration)	1450000
		By Equity Shareholders A/c (Loss)	50000
	1700000		1700000

A Ltd. Account

To Realisation A/c	Rs. 1450000	By Shares in A Ltd. (1450000x3/4)	Rs. 1087500
		By Equity Shareholders A/c – set-off (1450000x1/4)	362500
	1450000		1450000

Shares in A Ltd. Account

To A Ltd.	Rs. 1087500	By Equity Shareholders A/c	Rs. 1087500
	1087500		1087500

Equity Shareholders Account

To Realisation A/c (loss)	Rs. 50000	By Equity Share Capital	Rs. 1000000
To Shares in A Ltd.	1087500	By General Reserve	500000
To A Ltd. (set-off)	362500		
	1500000		1500000

In the Books of A Ltd.

Journal Entries

Goodwill A/c	Dr	Rs. 50000	Rs.
Fixed Assets A/c	Dr	450000	
Current Assets A/c	Dr	1300000	
To Current Liabilities A/c			100000
To Provision for Tax A/c			100000
To Liquidators of B Ltd. A/c			1450000
To Capital Reserve (Bal. Fig.)			150000
(purchase consideration due and assets and liabilities taken over)			

Liquidators of B Ltd. A/c Dr To Equity Share capital A/c To Shares in B Ltd. (payment of purchase consideration)	1450000	1087500 362500
Shares in B Ltd. A/c Dr To Capital Reserve A/c (362500-300000) (profit on shares in B Ltd. transferred to Capital Reserve)	62500	62500
Bank A/c Dr To P & L A/c (Dividend received from B Ltd.)	25000	25000
Capital Reserve A/c Dr To Stock A/c (unrealized profit in stock purchased from B Ltd. eliminated)	25000	25000
Creditors (Current Liabilities) A/c Dr To Debtors (Current Assets) (cancellation of mutual -debt)	50000	50000
Capital Reserve A/c Dr To Goodwill A/c (Goodwill set-off against capital reserve)	50000	50000

Balance Sheet of A Ltd.as on 31st March 2015 (after amalgamation)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	5087500
b. Reserves and Surplus	2	3162500
Non-current Liabilities		Nil
Current Liabilities		
Current Liabilities (3000000+100000-50000)		3050000
Provision for Tax		100000
Total		11400000
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible (3000000+450000)		3450000
b. Intangible		Nil
Investments (500000-362500+62500)		200000
Current Assets		
Current Assets (6500000+1300000+25000-25000-50000)		7750000
Total		11400000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 50875 Equity shares of Rs. 100 each, fully paid	5087500
2.	Reserves and Surplus	

Capital Reserve (150000+62500-25000-50000)	137500
General Reserve	3000000
P & L A/c	25000
	3162500

Shares held by transferor company in transferee company

The following steps are involved:

1. Calculate the purchase consideration, depending on the method applicable. However,
 - a) If purchase consideration is calculated under 'net assets method', investment held by transferor company in transferee company must not be considered as an asset.
 - b) If purchase consideration is calculated under 'net payment method', deduct the number of shares of transferee company held by transferor company from total number of shares to be discharged by the transferee company.
2. In the books of transferor company:
 - a) Shares held by transferor company in transferee company must not be transferred to Realisation Account. It must be shown as the balance in the Shares in Transferee Company Account (Investment Account).
 - b) The shares received from Transferee Company as a part of purchase consideration must be debited to Shares in Transferee Company Account (Investment Account).
 - c) Transfer the profit or loss on revaluation of investment to the Realisation Account.
 - d) Transfer the balance in Shares in Transferee Company Account (Investment Account) to the Shareholders Account.
3. In the books of transferee company – There will be no specific entry.

Illustration 10: Following are the liabilities and assets of Z Ltd. and A Ltd. as on 31st March 2015.

Liabilities	Z Ltd Rs.	A Ltd Rs.	Assets	Z Ltd Rs.	A Ltd Rs.
Equity Shares of Rs. 10 each	200000	400000	Sundry Assets (no goodwill)	310000	600000
Reserves and Surplus	40000	100000	Loan to A Ltd.	30000	
7% Debentures of Rs. 100 each	100000		Investments – 5000 shares in A Ltd.	50000	
Loan from Z Ltd.		30000			
Other Liabilities	50000	70000			
	390000	600000		390000	600000

A Ltd. merges Z Ltd. in the nature of purchase on the following terms:

- a) A Ltd. will issue sufficient number of shares at Rs. 11 each and pay Re. 0.50 each per share held by members of Z Ltd.

- b) 7% Debentures of Z Ltd. are taken over by A Ltd. along with other liabilities of Z Ltd.

Show the ledger accounts in the books of Z Ltd. and pass journal entries in the books of A Ltd. Also prepare the balance sheet of A Ltd. after amalgamation.

Solution:

Calculation of Purchase Consideration:

Total number of shares of A Ltd. to be issued to Z Ltd.	20000
Less: Shares of A Ltd. already held by Z Ltd.	5000
New shares of A Ltd. to be issued	15000
Total value of new shares (15000x11)	165000
Cash payment (20000x0.50)	10000
Purchase Consideration	175000

Ledger Accounts in the books of Z Ltd.

Realisation Account

	Rs.		Rs.
To Sundry Assets	310000	By Other Liabilities	50000
To Loan to A Ltd.	30000	By 7% Debentures	100000
		By A Ltd. (Purchase Consideration)	175000
		By Shares in A Ltd.	5000
		By Equity Shareholders A/c (Loss)	10000
	340000		340000

A Ltd. Account

	Rs.		Rs.
To Realisation A/c	175000	By Shares in A Ltd. (15000xRs. 11)	165000
		By Cash	10000
	175000		175000

Shares in A Ltd. Account

	Rs.		Rs.
To Balance b/d	50000	By Equity Shareholders A/c	220000
To A Ltd.	165000		
To Realisation (Profit)	5000		
	220000		220000

Cash Account

	Rs.		Rs.
To A Ltd.	10000	By Equity Shareholders A/c	10000
	10000		10000

Equity Shareholders Account

	Rs.		Rs.
To Realisation A/c (loss)	10000	By Equity Share Capital	200000
To Shares in A Ltd.	220000	By Reserves and Surplus	40000
To Cash A/c	10000		
	240000		240000

In the Books of A Ltd.

Journal Entries

	Dr		Rs.		Rs.
Sundry Assets A/c			310000		
Loan of A Ltd. A/c			30000		
To Other Liabilities A/c					50000

To 7% Debentures A/c			100000
To Liquidators of Z Ltd. A/c			175000
To Capital Reserve (Bal. Fig.)			15000
(Purchase consideration due and assets and liabilities taken over)			
Liquidators of Z Ltd. A/c Dr		175000	
To Equity Share capital A/c (15000x10)			150000
To Securities Premium A/c (15000x1)			15000
To Cash A/c			10000
(payment of purchase consideration)			
Loan from Z Ltd. A/c Dr		30000	
To Loan of A Ltd. A/c			30000
(Elimination of mutual - loan)			

Balance Sheet of A Ltd.as on 31st March 2015 (after amalgamation)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	550000
b. Reserves and Surplus	2	130000
Non-current Liabilities		
7% Debentures		100000
Current Liabilities		
Other Liabilities (50000+70000)		120000
Total		900000
B. Assets		
Sundry Assets:		
(600000+310000-10000 cash paid to Z Ltd.)		900000
Total		900000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital	
	Issued and Subscribed	
	55000 Equity shares of Rs. 10 each, fully paid	550000
2.	Reserves and Surplus	
	Reserves – given	
	Capital Reserve	100000
	Securities Premium	15000
		15000
		130000

Shares held by both the companies in each other

If purchase consideration is to be calculated under 'net payment method', the purchase consideration is calculated as under:

- Calculate the number of shares to be given to the outside shareholders in transferor company.
- Calculate the number of shares due to the transferee company as a shareholder in the transferor company.
- Obtain the total of (a) and (b).
- Deduct the number of shares already held by the transferor company from the total under (c).
- To calculate purchase consideration, multiply the number of shares as under (d) with the issue price.

Illustration 11: Following are the liabilities and assets of X Ltd. and Y Ltd. X Ltd. is to absorb Y Ltd., in the nature of purchase, by issuing 5 shares of Rs. 10 each at a premium of 10% for every 4 shares held in Y Ltd.

Liabilities	X Ltd. Rs.	Y Ltd. Rs.	Assets	X Ltd. Rs.	Y Ltd. Rs.
Equity Shares of Rs. 10 each	1000000	600000	Fixed Assets	800000	400000
General Reserves	100000	80000	Investments:		
Creditors	200000	120000	12000 shares in Y Ltd.	160000	
			10000 shares in X Ltd.		120000
			Current Assets	340000	280000
	1300000	800000		130000	800000
				0	

Show the important ledger accounts in the books of Y Ltd and opening entries in the books of X Ltd, assuming current assets of Y Ltd. are taken at Rs. 180000. Also prepare the balance sheet of X Ltd. after absorption.

Solution:

Calculation of Purchase Consideration:

- No. of shares held by outsiders $(60000 - 12000) = 48000$
No. of shares due to outsiders $(48000 \times 5/4)$ 60000
- No. of shares due to X Ltd. (will not be issued) $12000 \times 5/4$ 15000
- Total of (a) and (b) 75000
- Less: Already held by Y Ltd. 10000
- No. of shares constituting purchase consideration 65000

Purchase Consideration = $65000 \times \text{Rs. } 11 = \text{Rs. } 715000$

Ledger Accounts in the books of Y Ltd.
Realisation Account

	Rs.		Rs.
To Fixed Assets	400000	By Sundry Creditors	120000
To Current Assets	280000	By X Ltd. (Purchase Consideration)	715000

To Shares in X Ltd. (loss – 10000 shares @ Re.1)	10000		
To Equity Shareholders A/c (Profit)	145000		
	835000		835000

X Ltd. Account

To Realisation A/c	Rs. 715000	By Shares in X Ltd. (50000xRs. 11) By Equity Shareholders A/c (15000xRs. 11) – set-off	Rs. 550000 165000
	715000		715000

Shares in X Ltd. Account

To Balance b/d To X Ltd.	Rs. 120000 550000	By Realisation (Loss on revaluation 10000xRe.1) By Equity Shareholders A/c	Rs. 10000 660000
	670000		670000

Equity Shareholders Account

To X Ltd. (set-off) To Shares in X Ltd.	Rs. 165000 660000	By Equity Share Capital By General Reserve By Realisation A/c (Profit)	Rs. 600000 80000 145000
	825000		825000

In the Books of X Ltd.
Journal Entries

		Rs.	Rs.
Fixed Assets A/c	Dr	400000	
Current Assets A/c	Dr	180000	
Goodwill A/c (Bal. Fig.)	Dr	255000	
To Sundry Creditors A/c			120000
To Liquidators of Y Ltd. A/c (purchase consideration due and assets and liabilities taken over)			715000
Liquidators of Y Ltd. A/c	Dr	715000	
To Equity Share capital A/c (50000x10)			500000
To Securities Premium A/c (50000x1)			50000
To Shares in Y Ltd (payment of purchase consideration)			165000
Shares in Y Ltd. A/c	Dr	5000	
To Goodwill A/c (165000-160000) (profit on revaluation of shares in Y Ltd. credited to			5000

	Goodwill A/c)			
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Balance Sheet of X Ltd. (after absorption)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	1500000
b. Reserves and Surplus	2	150000
Non-current Liabilities		Nil
Current Liabilities		
Sundry Creditors(200000+120000)		320000
Total		1970000
B. Assets		
Non-current Assets		
Fixed Assets		
a. Tangible (800000+400000)		1200000
b. Intangible - Goodwill		250000
Current Assets (340000+180000)		520000
Total		1970000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 150000 Equity shares of Rs. 10 each, fully paid	1500000
2.	Reserves and Surplus General Reserve Securities Premium	100000 50000 150000

REVIEW QUESTIONS**A. Short Answer Type questions**

1. Define Amalgamation.
2. What do you mean by amalgamation in the nature of merger?
3. What is meant by amalgamation in the nature of purchase?
4. Define purchase consideration.
5. What do you mean by net worth method of purchase consideration?

B. Short Essay Type Questions

1. Distinguish between amalgamation in the nature of purchase and amalgamation in the nature of merger.
2. What are the various methods for calculation of purchase consideration?

C. Practical Problems

1. X Ltd. agrees to absorb Y Ltd. in the nature of purchase on 31st March 2015 on which date their liabilities and assets are as under:

Liabilities	X Ltd (Rs.)	Y Ltd (Rs.)	Assets	X Ltd (Rs.)	Y Ltd (Rs.)
Equity Share Capital of Rs. 10 each	200000	100000	Fixed Assets	100000	70000
Profit & Loss Account	60000	40000	Stock	93000	30000
Sundry Creditors	75000	35000	Sundry Debtors	90000	50000
Bills Payable	15000	5000	Bills Receivable	47000	22000
	350000	180000	Bank	20000	8000
				350000	180000

The purchase consideration is Rs. 160000 payable in equity shares of Rs. 10 each. The bills payables of X Ltd. include Rs. 8000 due to Y Ltd. and sundry debtors of X Ltd. include Rs. 15000 due from Y Ltd. The stock of X Ltd. includes Rs. 11000 worth of goods purchased from Y Ltd. on which Y Ltd. made a profit of 10% on cost and the stock of Y Ltd. includes Rs. 20000 worth of goods purchased from X Ltd. on which X Ltd. made a profit of 10% on sale price.

Pass journal entries in the books of both the companies and prepare the balance sheet of X Ltd. after absorption (Amalgamation in the nature of purchase).

(Answer: Profit on Realisation- Rs. 20000; Balance Sheet Total – Rs. 527000).

2. The liabilities and assets of Sky Ltd. and Blue Ltd. as on 1st January 2015 were as under:

Liabilities	Sky Ltd (Rs.)	Blue Ltd (Rs.)	Assets	Sky Ltd (Rs.)	Blue Ltd (Rs.)
Equity Shares of Rs. 10 each, fully paid	500000	1000000	Land and Building	300000	400000
Profit & Loss Account	50000		Plant and Machinery	200000	300000
6% Debentures	50000		Goodwill	50000	50000
Sundry Creditors	50000	80000	Patents		10000
			Stock	20000	100000
			Sundry Debtors	20000	120000
			Cash at Bank	60000	50000
			Profit & Loss Account		50000
	650000	1080000		650000	1080000

Sky Ltd. and Blue Ltd. decided to amalgamate under the name of Sky Blue Ltd. which was floated for the purpose with an authorized capital of 20000 shares of Rs. 100 each.

Sky Blue Ltd. took over all assets except cash at bank, but considered goodwill of Blue Ltd. as valuables. It also agreed to take over trade creditors. For the purpose, it agreed to issue fully paid shares to the liquidators of the two companies.

Give journal entries and ledger accounts in the books of Sky Ltd. and Blue Ltd. and opening entries in the books of Sky Blue Ltd. Also show the balance sheet of Sky Blue Ltd. after the amalgamation (Amalgamation in the nature of purchase).

(Answer: Sky Ltd. – Purchase Consideration – Rs. 490000, Loss on Realisation- Rs. 50000; Blue Ltd. – Purchase Consideration – Rs. 900000, Profit/Loss on Realisation- Nil; Sky Blue Ltd. - Balance Sheet Total –Rs. 1520000).

3. Following are the liabilities and assets of P Ltd. and Q Ltd. P Ltd. is to absorb Q Ltd., in the nature of purchase, by issuing 5 shares of Rs. 10 each at a premium of 10% for every 4 shares held in Q Ltd.

Liabilities	P Ltd Rs.	Q Ltd Rs.	Assets	P Ltd Rs.	Q Ltd Rs.
Equity Shares of Rs. 10 each	1600000	960000	Fixed Assets	1280000	640000
General Reserves	160000	128000	Investments:		
Creditors	320000	192000	19200 shares in Q Ltd.	256000	
			16000 shares in P Ltd.		192000
			Current Assets	544000	448000
	2080000	1280000		2080000	1280000

Show the important ledger accounts in the books of Q Ltd and opening entries in the books of P Ltd, assuming current assets of Q Ltd. are taken at Rs. 288000. Also prepare the balance sheet of P Ltd. after absorption.

(Answer: Purchase Consideration – 1144000; Profit on Realisation- Rs. 232000; Balance Sheet Total – Rs. 3152000).

LESSON 4

ACCOUNTING FOR INTERNAL RECONSTRUCTION

Meaning of Internal Reconstruction

There are two types of reconstruction, namely external reconstruction and internal reconstruction. In external reconstruction, a new company is formed to take over the assets and liabilities of an existing company which goes into liquidation. But in internal reconstruction, there will be neither liquidation of an existing company nor formation of a new company.

Internal reconstruction means an internal rearrangement that gives a new look to the capital structure, adjusts the rights of shareholders, debenture holders and creditors along with some adjustments in the values of assets and writing off fictitious assets. Internal reconstruction may be done due to the accumulated losses, shortage of working capital, overvaluation of assets etc.

Difference between Internal reconstruction and External reconstruction

Internal reconstruction	External reconstruction
1. The company does not lose its identity	1. The company loses its identity
2. The overvalued assets are revalued at their net worth and the losses written off.	2. The newly formed company takes over the assets and liabilities of the liquidated company at agreed values.
3. No new company is formed nor is any existing company liquidated. It is the internal matter of a single company.	3. A new company is formed in place of the old company.
4. Debenture holders, creditors and bank overdraft may continue.	4. These parties will have to be settled.

Forms or Methods of Internal reconstruction

1. Alteration of share capital.
2. Reduction of share capital.
3. Variation of shareholders' rights.
4. Scheme of compromise.

Alteration of Share Capital

According to Sec. 94 of the Companies Act, a limited company can, if authorized by its articles of association, alter the capital clause of its memorandum of association in any of the following ways.

- a. By increasing its share capital by issue of new shares.
- b. By consolidating existing shares of smaller amounts into shares of larger amounts.
- c. By subdividing the existing share into shares of smaller amounts.
- d. By converting fully paid shares into stock or stock into fully paid shares.

Accounting entries for alteration of capital

1. For increasing its share capital

i. Bank A/c Dr

To Share Application & Allotment A/c

ii. Share Application & Allotment A/c Dr

To Share Capital A/c

2. For consolidation of shares:

Share Capital (old) A/c Dr

To Share Capital (New) A/c

3. For subdivision of shares:

Share Capital (old) A/c Dr

To Share Capital (New) A/c

4. For conversion of shares into stock:

Share Capital A/c Dr

To Stock A/c

5. For conversion of stock into shares:

Stock A/c Dr

To Share Capital A/c

Illustration 1: A Ltd having a share capital of Rs.500000 divided into 5000 shares of Rs.100 each, resolves to subdivide the shares into 50000 shares of Rs.10 each. Pass the journal entry.

Solution:

Share Capital (Rs.100) A/c Dr 500000

To Share Capital (Rs.10) A/c 500000

Illustration 2: X Ltd resolves to convert its 50000 equity shares of Rs.10 each fully paid into Rs.500000 worth of equity stock. Journalise the transaction.

Solution:

Equity Share Capital A/c	Dr	500000
To Equity Stock A/c		500000

Illustration 3: B Ltd having an equity share capital of Rs.100000 divided into 10000 shares of Rs.10 each resolves to consolidate the shares into 1000 shares of Rs.100 each. Pass the journal entry.

Solution:

Equity Share Capital (Rs.10) A/c	Dr	100000
To Equity Share Capital (Rs.100) A/c		100000

Reduction of Share Capital

Reduction of capital is unlawful except when sanctioned by the court because conservation of capital is one of the main principles the Company Act. In order to reduce the share capital, the company must be authorized by its articles of association, a special resolution must be passed at general meeting, and confirmation of court etc. is required. A company can reduce its share capital by any of the following ways:

- By reducing the liability of the shareholders for uncalled capital.
- By paying off the surplus capital.
- By reducing paid up capital which is not represented by available assets.

Accounting entries for reduction of share capital

- For reducing the liability in respect of uncalled capital:

Share Capital (old) A/c	Dr
To Share Capital (New) A/c	

- For paying off surplus capital:

i. Share Capital A/c	Dr
To Shareholders A/c	

ii. Shareholders A/c	Dr
To Bank A/c	

- For reducing or cancelling paid up capital which is not represented by available assets:
 - For reducing paid up capital by changing its face value:

Share Capital (old) A/c	Dr
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To Share Capital (New) A/c

To Capital Reduction A/c

ii. For reducing paid up capital without changing its face value:

Share Capital A/c

Dr (amount of reduced capital)

To Capital Reduction A/c

Capital Reduction Account

Capital Reduction Account is a new account opened for transferring that part of capital which is lost or not represented by the assets. It is a temporary account opened for carrying out internal reconstruction. This account will be closed as soon as the scheme is carried out. The balance in Capital Reduction A/c can be used to write off fictitious assets, past losses and excess value of assets. The entry is as follows:

Capital Reduction A/c

Dr

To P&L A/c (Debit balance)

To Goodwill A/c

To Preliminary Expenses A/c

To discount on issue of shares/ debentures A/c

To Patents/ Trademarks A/c

To Plant & Machinery A/c

To other Assets A/c

To Capital Reserve A/c (Bal. Fig)

Illustration 4: The following are the liabilities and assets of Brahma Ltd as on 31st March 2015.

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
5000 Equity shares of Rs.100 each fully paid	500000	Plant & Machinery	173000
7500 10% Preference shares of Rs.100 each fully paid	750000	Patents	850000
Sundry creditors	50000	Stock in trade	55000
		Sundry debtors	77000
		Profit & Loss A/c	145000
	1300000		1300000

The company suffered losses and the following scheme was adopted:

- Equity shares are to be reduced to an equal number of shares of Rs.25 each.
- The preference shares to be reduced to an equal number of shares of Rs.50 each.
- The amount available to be used to write off Rs.39240 of plant and machinery and Rs.15000 of stock in trade.
- Made a provision of Rs.15300 for doubtful debt.

- e. The balance being used to write off patents.

Journalise the transactions and prepare the balance sheet after reconstruction.

Solution:

Journal

			Rs.	Rs.
2015	Equity Share Capital (Rs.100) A/c	Dr	500000	
Mar 31	To Equity Share Capital (Rs.25) A/c			125000
	To Capital Reduction A/c			375000
	(reduction of equity share capital to Rs.25 each)			
	10% Preference Share Capital (Rs.100) A/c Dr		750000	
	To Preference Share Capital (Rs.50) A/c			375000
	To Capital Reduction A/c			375000
	(reduction of preference share capital to Rs.50)			
	Capital Reduction A/c	Dr	750000	
	To P&L A/c			145000
	To Plant & Machinery A/c			39240
	To Stock in trade A/c			15000
	To Provision for doubtful debts A/c			15300
	To Patents (Bal. Fig)			535460
	(utilization of capital reduction A/c)			

Balance Sheet of X Ltd (After reconstruction) as on 1st April 2015

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	500000
b. Reserves and Surplus	2	Nil
Non-current Liabilities	3	Nil
Current Liabilities		
a. Trade Payables	4	50000
Total		550000
B. Assets		
Non-current Assets		
a. Fixed Assets		
i. Tangible		
ii. Intangible - Patents (850000-535460)	5	133760
b. Non-current Investment		314540
c. Other non-current Assets		Nil
Current Assets		
Stock in trade (55000-15000)		40000
Sundry debtors (77000-15300)		61700

Total		550000
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Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 5000 Equity shares of Rs.25 each fully paid 7500 10% Preference shares of Rs.50 each fully paid	 125000 375000 500000
2.	Reserves and Surplus	Nil
3.	Non-current Liabilities	Nil
4.	Trade Payables Sundry Creditors	50000
5.	Fixed Assets – Tangible Plant & Machinery(173000-39240)	133760

Illustration 5: The following are the liabilities and assets of Jay Ram Ltd as on 31st March 2015

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
10000 Equity shares of Rs.10 each fully paid	100000	Goodwill	25000
1000 7% Preference shares of Rs.100 each fully paid	100000	Other Fixed assets	104000
Sundry creditors	50000	Current assets	95000
	250000	Profit and loss A/c	26000
			250000

It was decided that equity shares of Rs.10 each be reduced to shares of Rs.7 each and 7% preference shares of Rs.100 each be reduced to 8% preference shares of Rs.75 each. The number of shares in each case is to remain the same. It was decided that the amount so available be used for writing of the debit balance in P&L A/c, goodwill A/c and with the balance for writing down the fixed assts. Journalise the transactions and prepare the balance sheet after reconstruction.

Solution:

Journal

			Rs.	Rs.
2015	Equity Share Capital (Rs.10) A/c Dr		100000	
Mar 31	To Equity Share Capital (Rs.7) A/c			70000
	To Capital Reduction A/c			30000
	(reduction of equity share capital to Rs.7 each)			
	7% Preference Share Capital (Rs.100) A/c Dr		100000	
	To 8% Preference Share Capital (Rs.75) A/c			75000
	To Capital Reduction A/c			25000
	(reduction of preference share capital to Rs.75)			
	Capital Reduction A/c Dr		55000	
	To P&L A/c			26000
	To Goodwill A/c			25000
	To Fixed assets A/c			4000
	(utilization of capital reduction A/c)			

Balance Sheet as on 1 April 2015 (After reconstruction)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	145000
b. Reserves and Surplus	2	Nil
Non-current Liabilities	3	Nil
Current Liabilities		
a. Trade Payables	4	50000
Total		195000
B. Assets		
Non-current Assets		
a. Fixed Assets		
i. Tangible	5	100000
ii. Intangible		Nil
b. Non-current Investment		Nil
c. Other non-current Assets		Nil
Current Assets		95000
Total		195000

Notes to Accounts

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 10000 Equity shares of Rs.7each fully paid 1000 8% Preference shares of Rs.75 each fully paid	 70000 75000 145000
2.	Reserves and Surplus	Nil
3.	Non-current Liabilities	Nil
4.	Trade Payables Sundry Creditors	50000
5.	Fixed Assets – Tangible Fixed assets (104000-4000)	100000

Variation of Shareholders' rights

Under this, the shareholders rights are altered by changing the rate of dividend or changing the classes of shares. For example, it can be done by changing the cumulative preference shares to non-cumulative preference shares or from 10% preference shares into 7% preference shares etc.

Scheme of compromise or arrangement

Here a compromise or arrangement is made with creditors or debenture holders while settling their liabilities. This scheme involves the following:

1. For sacrifice by debenture holders:

Debentures A/c	Dr (with amount sacrificed)
To Capital Reduction A/c	

2. For exchange of debentures for new debentures or shares:

Debentures A/c	(old)	Dr
To Debentures/ Share Capital A/c (New)		

3. For sacrifice by creditors:

Creditors A/c	Dr (with amount sacrificed)
To Capital Reduction A/c	

4. For agreement to receive shares or debentures in settlement of claims of creditors:

Creditors A/c

Dr

To Share Capital/ debentures A/c

Miscellaneous journals:

1. For appreciation of fixed assets:

Fixed assets A/c

Dr (with amount of appreciation)

To Capital Reduction A/c

2. For expense incurred on reconstruction:

Capital Reduction A/c

Dr

To Bank A/c

Illustration 6: The liabilities and assets of Gloomy Ltd as on 31 March 2015 was as follows:

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
4000 Equity shares of Rs.100 each fully paid	400000	Goodwill	15000
2000 5% Preference shares of Rs.100 each fully paid	200000	Freehold premises	200000
6% Debentures	100000	Plant & Machinery	300000
Bank overdraft	35000	Stock in trade	50000
Sundry creditors	100000	Sundry debtors	40000
		Cash in hand	5000
		Profit & Loss A/c	225000
	835000		835000

The company has got the following scheme of capital reduction approved by the court:

- Preference shares to be reduced to Rs.60 per share fully paid up and equity shares to Rs.40 per share fully paid up.
- The debenture holders to take over stock in trade and book debts in full satisfaction of the amount due to them.
- The value of freehold premises to be increased by 10%.
- The value of plant and machinery to be depreciated by 33 1/3 %.
- The goodwill account to be eliminated.
- Expenses of reconstruction amounted to Rs.4000.

Journalise the transactions and prepare the balance sheet after reconstruction.

Solution:

Journal

			Rs.	Rs.
2015	Equity Share Capital (Rs.100) A/c	Dr	400000	
Mar 31	To Equity Share Capital (Rs.40) A/c			160000
	To Capital Reduction A/c			240000
	(reduction of equity share capital to Rs.40 each)			
	5% Preference Share Capital (Rs.100) A/c	Dr	200000	
	To 5%Preference Share Capital(Rs.60)A/c			120000
	To Capital Reduction A/c			80000
	(reduction of preference share capital to Rs.60)			
	6% Debentures A/c	Dr	100000	
	To Stock in trade A/c			50000
	To Sundry debtors A/c			40000
	To Capital Reduction A/c (Bal. Fig)			10000
	(stock and debtors taken over by debenture holders)			
	Freehold premises A/c	Dr	20000	
	To Capital Reduction A/c			20000
	(Freehold premises appreciated by 10%)			
	Capital Reduction A/c	Dr	350000	
	To P&L A/c			15000
	To Goodwill A/c			225000
	To Plant and machinery A/c			100000
	To Bank A/c (expenses)			4000
	To Capital Reserve A/c			6000
	(utilization of capital reduction A/c)			

Balance Sheet as on 1 April 2015 (After reconstruction)

Particulars	Note No.	Amount (Rs.)
A. Equity and Liabilities		
Shareholders' Fund		
a. Share Capital	1	280000
b. Reserves and Surplus	2	6000
Non-current Liabilities	3	35000
Current Liabilities		
a. Trade Payables	4	100000
Total		421000
B. Assets		
Non-current Assets		
a. Fixed Assets		
i. Tangible	5	420000
ii. Intangible		Nil
b. Non-current Investment		Nil

Note No.	Particulars	Amount (Rs.)
1.	Share Capital Issued and Subscribed 4000 Equity shares of Rs.40each fully paid 2000 5% Preference shares of Rs.60 each fully paid	160000 120000 280000
2.	Reserves and Surplus Capital Reserve	6000
3.	Non-current Liabilities Bank Overdraft	35000
4.	Trade Payables Sundry Creditors	100000
5.	Fixed Assets – Tangible Freehold Premises (200000+20000) Plant & Machinery(300000-100000)	220000 200000 420000

Page 104

Dr
Surrendered shares A/c
To Capital Reduction A/c

Illustration 7: A company has equity share capital of Rs.1000000 consisting 10000 shares of RS.100 each. It is resolved

- To subdivide the shares into shares of Rs.10 each
- To ask their shareholders to surrender 50% of their shares
- To issue 60% of the surrendered shares to 15% debenture holders of Rs.400000 in full settlement of their claims
- To cancel the unissued surrendered shares.

Give entries in the books of the company.

Solution:

Journal		Rs.	Rs.
Equity Share Capital (Rs.100) A/c	Dr	1000000	
To Equity Share Capital (Rs.10) A/c			1000000
(subdivision of equity shares into Rs.10 each)			
Equity Share capital A/c	Dr	500000	
To Surrendered shares A/c			500000
(50% of shares surrendered)			
Surrendered shares A/c	Dr	300000	
15% Debentures A/c	Dr	400000	
To Equity Share capital A/c			300000
To Capital Reduction A/c			400000
(issue of 60% surrendered shares to debenture holders in full settlement of their claims)			
Surrendered Shares A/c	Dr	200000	
To Capital Reduction A/c			200000
(cancellation of unissued surrendered shares)			

REVIEW QUESTIONS

A. Short Answer Type questions

- What do you mean by internal reconstruction?
- What is Capital Reduction account?
- What do you mean by surrender of shares?

B. Short Essay Type Questions

- Distinguish between internal reconstruction and external reconstruction.
- How will alter the share capital of a company?

C. Essay Type Questions

3. Write an essay on forms or methods of internal reconstruction.

D. Practical Problems

1. The following are the liabilities and assets of Jaya Ltd as on 31st March 2015

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
15000 Equity shares of Rs.10 each fully paid	150000	Land and Building	145000
1500 12% Preference shares of Rs.100 each fully paid	150000	Machinery	35000
Sundry creditors	100000	Stock	25000
		Debtors	40000
		Cash at Bank	5000
		Profit and loss A/c	150000
	400000		400000

It was decided that equity shares of Rs.10 each be reduced to shares of Rs.4 each and 12% preference shares of Rs.100 each be reduced to 12% preference shares of Rs.40 each. The number of shares in each case is to remain the same. It was decided that the amount so available be used for writing down stock by Rs. 10000, writing off the debit balance in P&L A/c, reducing the machinery by Rs. 10000 and with the balance for providing the provision for bad debts against sundry debtors.

Journalise the transactions and prepare the balance sheet after reconstruction.

(Answer: Total Capital Reduction – Rs. 180000; Balance Sheet Total – Rs. 220000).

2. The following are the liabilities and assets of Ghosh Ltd as on 31st December 2014

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Equity shares of Rs.10 each	500000	Fixed Assets	233500
10% Preference shares of Rs.100 each fully paid	200000	Stock	406200
Reserve	226750	Debtors	233750
11% Debentures of Rs. 100 each	100000	Cash	12300
Creditors	137250	Profit and loss A/c	278250
	1164000		1164000

The company after the approval of the court puts the following scheme of reconstruction:

- Each existing preference share is to be reduced to Rs. 35, of which Rs. 20 will be represented by new 12% preference shares and Rs. 15 by new equity shares.
- Each debenture of Rs. 100 is to be exchanged for Rs. 50 of new 13% debenture, one new 12% preference shares of Rs. 25 each and four new equity shares of Rs. 2.50 each.
- Each existing equity share is to be reduced to Rs. 2.50.

The reduction of capital and reserves are utilized for writing off losses, 50% stock and debtors and balance, if any, is used for writing-down fixed assets. Show the necessary journal entries and draw the revised balance sheet.

(Answer: Hint – Reserve is transferred to Capital Reduction A/c; Total Capital Reduction – Rs. 746750; Balance Sheet Total – Rs. 417250).

LESSON 5

LIQUIDATION OF COMPANIES

Introduction

A company comes into existence through a legal process and also a company can come to an end by law. Some legal formalities are required to close the affairs of a company. Such legal procedures can be called as liquidation of companies.

Meaning of Liquidation

Simply, liquidation or winding up is the legal procedure by which a company comes to its end. Liquidation or winding up of a company can be defined as “the process whereby its life is ended and its property is administered for the benefit of its creditors and members”. An administrator, namely a Liquidator, is appointed and he takes control of the company, collects its assets, pays its debts and finally distributes any surplus among the members in accordance with their rights.

Unlike an insolvent individual or partnership firm, insolvency proceedings are not applicable to a company. A solvent as well as insolvent company may be liquidated.

Modes of Winding up or Liquidation

According to section 271 of the Companies Act, 2013 a company can be liquidated or wound up in the following ways:

- a) By the Tribunal
- b) Voluntary

Notwithstanding anything contained in any other Act, the provisions of this Act with respect to winding up shall apply to the winding up of a company in any of the modes specified under this section.

Winding up by the Tribunal

As per section 271 of the Companies Act 2013, in the following circumstances a company may be wound up by the Tribunal:

- (1) A company may, on a petition under section 272, be wound up by the Tribunal –
 - (a) if the company is unable to pay its debts;
 - (b) if the company has, by special resolution, resolved that the company be wound up by the Tribunal;
 - (c) if the company has acted against the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality;
 - (d) if the Tribunal has ordered the winding up of the company under Chapter XIX (of the Companies Act, 2013 dealing with revival and rehabilitation of sick companies);
 - (e) if on an application made by the Registrar or any other person authorised by the Central Government by notification under this Act, the Tribunal is of the opinion

that the affairs of the company have been conducted in a fraudulent manner or the company was formed for fraudulent and unlawful purpose or the persons concerned in the formation or management of its affairs have been guilty of fraud, misfeasance or misconduct in connection therewith and that it is proper that the company be wound up;

- (f) if the company has made a default in filing with the Registrar its financial statements or annual returns for immediately preceding five consecutive financial years; or
- (g) if the Tribunal is of the opinion that it is just and equitable that the company should be wound up.

Contributory

Contributory is a person liable to contribute to the assets of the company in the event of winding up. A contributory's liability is legal, not contractual. A contributory can be either a present member or a past member.

1. Present Members ('A' List of Contributories)

A present member is that member whose name is included in the register of members when the company is wound up. He is liable to contribute the amount remaining unpaid on the shares held by him if the amount is needed to make the payment to the legal claimant. In the case of company limited by guarantee, he is liable for the payment of guaranteed amount at the time of winding up.

2. Past Members ('B' List of Contributories)

Past members are those members who ceased to be shareholders (except by death) within one year of winding up of the company and can be called upon to pay, if the present contributories are not able to pay the liabilities of the company. Section 285 of the Companies Act, 2013 provides that:

- (a) A past member is not liable to contribute in respect of any liability of the company contracted after he ceased to be a member of the company.
- (b) A past member is not liable to contribute if he ceased to be a member of the company for one year or upward before the commencement of the winding up.
- (c) A past member is liable to contribute only if it appears to the Tribunal that present members are unable to make the contributions required to be made by them in pursuance of the Companies Act.
- (d) In the case of a company limited by shares, no contribution is required from any member excluding the amount (if any) unpaid on the shares in respect of which he is liable as such member.
- (e) In the case of a company limited by guarantee, no contribution is required from any member excluding the amount undertaken to be contributed by him in the event of the company being wound up.

Liquidator

A liquidator is the person who is appointed for the purpose of liquidating the company. The main job of a liquidator is to realise all assets of the liquidating company, collect the amount due from the contributories and distribute the sale proceeds of assets of the company.

among the right claimants. The company must submit a Statement of Affairs to the liquidator within 21 days of the passing of the winding up order.

In case of winding up of a company by the Tribunal, the Tribunal at the time of passing of the order of winding up, shall appoint an Official Liquidator or a liquidator from the panel maintained by the Central Government consisting of the names of the Chartered Accountants, advocates, Company Secretaries, Cost Accountants and such other professional as may be notified by the Central Government having atleast 10 years' experience in company matters.

In case of voluntary winding up, the voluntary liquidator is appointed by resolution in general body meeting of the members and or of the creditors.

Order of Payment

The amounts realised from the assets not specifically pledged and the amounts contributed by the contributories must be distributed in the following order of preference:

1. Expenditure of winding up incl. liquidator's remuneration.
2. Creditors (Debentures etc.) secured by a floating charge on the assets of the company.
3. Preferential Creditors.
4. Unsecured Creditors.
5. Surplus, if any among contributories (Preference shareholders and equity shareholders) according to their respective rights and interests

Preferential Creditors

Preferential creditors are unsecured creditors, having priority of claims over other unsecured creditors, not because of any security held by them but because of the provisions in the Companies Act. They are:

- a) All revenues, taxes, cesses and rates, payable to the Government or local authority, due and payable by the company within 12 months before the date of commencement of winding up.
- b) All wages or salaries (including commission) of any employee in respect of services rendered to the company and due for a period not exceeding four months within the said 12 months before the relevant date.
- c) All sums due as compensation under Workmen Compensation Fund Act, from a provident fund, pension fund, gratuity fund or any other employee welfare fund.

Statement of Affairs

Where the court has made a winding up order or appointed the official liquidator as provisional liquidator unless the court in its otherwise order, a statement as to the affairs of the company shall be made out and submitted to the official liquidator. This statement is known as a statement of affairs. This statement is to be submitted to the liquidator within 21 days from the date of winding up order. It is always open to inspection to the contributories or creditors of the company, on payment of a prescribed fee.

Form of Statement of Affairs

Statement as to the affairs of ...Ltd., on the... day of20.... being the date of the winding up order appointing Provisional Liquidator or the date directed by the Official Liquidator as the case may be showing assets of estimated realisable values and liabilities expected to rank.

Estimated Realisable Value (Rs.)
--

Assets not specifically pledged (as per list 'A')

Balance at Bank
 Cash in Hand
 Marketable Securities
 Bills Receivables
 Trade Debtors
 Loans and Advances
 Unpaid Calls
 Stock in Trade
 Work in Progress

 Freehold Property, Land and Buildings
 Leasehold Property
 Plant and machinery
 Furniture, Fittings, Utensils etc.
 Investments other than marketable securities
 Livestock
 Other Property, viz.,

Assets specifically pledged (as per list 'B')

	(a) Estimated realisable values (Rs.)	(b) Due to Secured Creditors (Rs.)	(c) Deficiency ranking as unsecured (Rs.)	(d) Surplus carried to last column (Rs.)
Total	----- -----	----- -----	----- -----	----- -----

Estimated surplus from assets specifically pledged -----

Estimated total assets available for preferential creditors, debenture holders
 secured by a floating charge, and unsecured creditors (carried forward) -----

SUMMARY OF GROSS ASSETS

Gross realisable value of assets specifically pledged Rs.
 Other Assets Rs.
 Gross Assets Rs.

Gross Liabilities (Rs.)	Liabilities (to be deducted from surplus or added to deficiency as the case may be)
-----	Secured creditors (as per list 'B') to the extent to which claims are estimated to be covered by assets specifically pledged item (a) or (b) whichever is less [insert in Gross Liabilities column only]
-----	Preferential creditors (as per list 'C')
	Estimated balance of assets available for debenture holders secured by a floating charge and unsecured creditors.

-----	Debenture holders secured by a floating charge (as per list 'D')	-----
	Estimated Surplus/ Deficiency as regards debenture holders	-----
-----	Unsecured creditors (as per list 'E')	-----
	Estimated unsecured balance of claims of creditors partly secured on specific assets, brought from preceding page.	-----
	Trade Accounts	-----
	Bills Payables	-----
	Outstanding Expenses	-----
-----	Contingent liabilities (state nature)	-----
-----	Estimated Surplus/ Deficiency as regards creditors (being difference between Gross Assets and Gross Liabilities)	-----
	Issued and Called-up Capital:	
	Preference Shares of each	-----
	Called-up (as per list 'F')	-----
	Equity Shares of Each	-----
	Called-up (as per list 'G')	-----
	Estimated Surplus/Deficiency as regards members (as per list 'H')	-----

Lists to be attached to the Statement of Affairs

As per the Companies Act, the following lists are to be attached to the Statement of Affairs:

1. **List 'A'** – A complete list of assets not specifically pledged.
2. **List 'B'** – A list of assets which are specifically pledged in favour of fully secured and partly secured creditors.
3. **List 'C'** – A list of preferential creditors.
4. **List 'D'** – A list of debenture holders and other creditors having a floating charge on the assets of the company.
5. **List 'E'** – A list containing the names, addresses and occupations of unsecured creditors and the amount due.
6. **List 'F'** – A list containing names and number and value of shares held by various preference shareholders.
7. **List 'G'** – A list showing the names and holdings of equity shareholders.
8. **List 'H'** – A list showing the surplus or deficiency in the Statement of Affairs that has been arrived at.

Procedure for preparation of the Statement of Affairs

The following points are to be kept in mind while preparing the Statement of Affairs:

1. Assets which are not specifically pledged are taken first. These assets are to be taken at realisable values. Calls in arrears are also treated as assets not specifically pledged. The uncalled capital is not shown as an asset.
2. If there is any surplus from assets specifically pledged that should be added with the realisable value of assets not specifically pledged.
3. From the resulting figure deduct the amount of preferential creditors.
4. Then deduct the amount of creditors having floating charge (E.g. Debenture holders). The balance will be surplus or deficiency as regards debenture holders.
5. From the balance amount obtained, deduct the amount of unsecured creditors. The resultant figure will be either surplus or deficiency as regards unsecured creditors.
6. If the balance amount is surplus, the share capital is to be deducted out of that amount or if it is deficiency, the share capital is to be added with the amount. The resultant figure may be surplus or deficiency as regards members or contributories.

Illustration 1: The following information were extracted from the books of a limited company on 31st March 2015 on that date a winding up order was made:

	Rs.
Cash in hand	6000
Stock in trade (Estimated to produce Rs. 18000)	24000
Furniture and fittings (Estimated to produce Rs. 2520)	3600
Plant and machinery (Estimated to produce Rs. 18720)	18000
Freehold land and buildings (Estimated to produce Rs. 54000)	36000
Book debts (Estimated to produce Rs. 6240)	7440
Unsecured creditors	84000
Preferential creditors	2400
Creditors fully secured (Value of securities Rs. 13200)	10800
Creditors partly secured (Value of securities Rs. 7200)	12000
Bank overdraft secured by a second charge on all assets of company	9600
10% Debentures secured by floating charge (interest paid to date)	60000
Equity share capital – 7200 shares of Rs. 10 each	72000
11% Preference share capital – 7800 shares of Rs. 10 each	78000
Calls in arrears on equity shares (Estimated to produce Rs. 1200)	3000

Prepare a Statement of Affairs as regards creditors and contributories.

Solution:

Statement of Affairs

as on 31st March 2015

					Estimated Realisable Value (Rs.)
Assets not specifically pledged (as per list 'A')					
Cash in Hand					6000
Sundry Debtors					6240
Calls in arrears					1200
Stock in Trade					18000
Freehold Land and Buildings					54000
Plant and machinery					18720
Furniture and Fittings					2520
					106680
Assets specifically pledged (as per list 'B')					
	(a) Estimated realisable values (Rs.)	(b) Due to Secured Creditors (Rs.)	(c) Deficiency ranking as unsecured (Rs.)	(d) Surplus carried to last column (Rs.)	
Security	13200	10800	-----	2400	
Security	7200	12000	4800	-----	
Total	20400	22800	4800	2400	
Estimated surplus from assets specifically pledged					2400
Estimated total assets available for preferential creditors, debenture holders secured by a floating charge, and unsecured creditors (carried forward)					109080
SUMMARY OF GROSS ASSETS					
Gross realisable value of assets specifically pledged					Rs. 20400
Other Assets					<u>Rs. 106680</u>
Gross Assets					<u>Rs. 127080</u>
Gross Liabilities (Rs.)	Liabilities (to be deducted from surplus or added to deficiency as the case may be)				
18000	Secured creditors (as per list 'B') to the extent to which claims are estimated to be covered by assets specifically pledged item (a) or (b) whichever is less [insert in Gross Liabilities column only]				
2400	Preferential creditors (as per list 'C')				2400
	Estimated balance of assets available for debenture holders secured by a floating charge and unsecured creditors.				106680
	Debenture holders secured by a floating charge (as per list 'D'): Debenture holders				60000

69600	Bank Overdraft	9600	69600
	Estimated Surplus as regards debenture holders		37080
	Unsecured creditors (as per list 'E')		
	Unsecured Creditors	84000	
88800	Unsecured balance of partly secured	4800	88800
178800			
	Estimated Deficiency as regards creditors (being difference between Gross Assets and Gross Liabilities)		51720
	Issued and Called-up Capital:		
	7800, 11% Preference Shares of Rs. 10 each		
	Called-up (as per list 'F')		78000
	7200 Equity Shares of 10 Each		
	Called-up (as per list 'G')	72000	
	Less: Calls in arrears	1800	70200
	Estimated Deficiency as regards members (as per list 'H')		199920

Illustration 2: Mr. Sharma is appointed as the liquidator of Sun Ltd. in voluntary liquidation on 1st July 2015. The following are the balances extracted from the books on that date:

Debit Balances	Rs.	Credit Balances	Rs.
Machinery	49500	Capital:	
Leasehold Properties	66000	26400 Equity shares of Rs.5 each	132000
Stock in trade	1650	Reserves for bad debts	16500
Book Debts	99000	Debentures	82500
Investments	9900	Bank Overdraft	29700
Calls in arrears	8250	Liabilities for purchases	33000
Cash in hand	1650		
Surplus A/c (Negative Bal.)	57750		
	293700		293700

Prepare a statement of affairs to be submitted in the meeting of the creditors. The following assets are valued as under:

Machinery Rs. 99000; leasehold properties Rs. 119900; investments Rs. 6600, and stock in trade Rs. 3300.

Bad debts are Rs. 3300 and the doubtful debts are Rs. 6600 which are estimated to realise Rs. 3300. The bank overdraft is secured by deposit of title deeds of leasehold properties. Preferential creditors are Rs. 1650. Telephone rent outstanding Rs. 132.

Solution:

Statement of Affairs of Sun Ltd.
as on 1st July 2015

	Estimated Realisable Value (Rs.)
Assets not specifically pledged (as per list 'A')	
Cash in Hand	1650
Book Debts	92400
Calls in arrears	8250
Stock in Trade	3300
Machinery	99000
Investments	6600
	211200

Assets specifically pledged (as per list 'B')

	(a) Estimated realisable values (Rs.)	(b) Due to Secured Creditors (Rs.)	(c) Deficiency ranking as unsecured (Rs.)	(d) Surplus carried to last column (Rs.)
Leasehold Properties	119900	29700	-----	90200
Total	119900	29700	-----	90200

Estimated surplus from assets specifically pledged

90200

Estimated total assets available for preferential creditors, debenture holders
secured by a floating charge, and unsecured creditors (carried forward)

301400

SUMMARY OF GROSS ASSETS

Gross realisable value of assets specifically pledged	Rs. 119900
Other Assets	<u>Rs. 211200</u>
Gross Assets	<u>Rs. 331100</u>

Gross Liabilities (Rs.)	Liabilities (to be deducted from surplus or added to deficiency as the case may be)	
29700	Secured creditors (as per list 'B') to the extent to which claims are estimated to be covered by assets specifically pledged item (a) or (b) whichever is less [insert in Gross Liabilities column only]	
1650	Preferential creditors (as per list 'C')	1650
	Estimated balance of assets available for debenture holders secured by a floating charge and unsecured creditors.	299750
82500	Debenture holders secured by a floating charge (as per list 'D'):	82500
	Estimated Surplus as regards debenture holders	217250

	Unsecured creditors (as per list 'E')		
	Liability for purchases	33000	
33132	Telephone rent outstanding	132	33132
146982			
	Estimated Surplus as regards creditors (being difference between Gross Assets and Gross Liabilities)		184118
	Issued and Called-up Capital:		
	26400 Equity Shares of Rs. 5 Each		
	Called-up (as per list 'G')		132000
	Estimated Deficiency as regards members (as per list 'H')		52118

Deficiency or Surplus Account

The official liquidator will specify a date for period (not less than three years) beginning with the date on which information is supplied for preparation to an account, to explain the deficiency or surplus. On that date either assets could exceed capital plus liabilities (or reserve) or there could be deficit or negative balance in Surplus Account. Deficiency Account is divided into two parts as follows:

1. The first part starts with the deficit on the given date, and contains every item that increases deficiency or reduce surplus such as losses, dividend etc.
2. The second part starts with the surplus on the given date and indicates all profits.

If the total of the first exceeds that of the second, there could be a deficiency to the extent of the difference and if the total of the second part exceeds that of the first, there could be a surplus.

Form of Deficiency or Surplus Account (List H)

Items contributing to Deficiency or Reducing Surplus:	Rs.
1. Excess (if any) of Capital and Liabilities over Assets on the ....20.. as shown by Balance Sheet(copy annexed)	
2. Net dividend and bonus declared during the period from.....20.. to the date of statement.	
3. Net trading losses (after charging items shown in note below) for the same period.	
4. Losses other than trading losses written off or for which provision has been made in the books during the same period (give particulars or annex schedule)	
5. Estimated losses now written off or for which provision has been made for purposes of preparing the statement (give particulars or annex schedule)	
6. Other items contributing to Deficiency or reducing Surplus	

Total	
<i>Items reducing Deficiency or Contributing to Surplus:</i>	
7. Excess (if any) of Assets over Capital and Liabilities on the ...20... as shown in the Balance Sheet (copy annexed)	
8. Net trading profit (after charging items show in note below) for the period from the ....20... to the date of statement.	
9. Profits and income other than trading profits during the same period (give particulars or annex schedule)	
10. Other items reducing Deficiency or contributing to Surplus	
Total	
Deficiency or Surplus as shown by the Statement	

Note: as to Net Trading Profits and Losses:

1. Provision for depreciation, renewals or diminution in value of fixed assets.
2. Charges for Indian income tax and other Indian taxation on profits.
3. Interest on debentures and other fixed loans.
4. Payments to directors made by the company and required by law to be disclosed in the accounts.

Exceptional or non-recurring expenditure	Rs.....
Less: Exceptional non-recurring receipts	Rs
Balance being other trading profits or losses	Rs.....
Net trading profits or losses as shown in Deficiency or Surplus Account above.	

Note: In case the company in liquidation has not maintained proper books of accounts after a certain date, a trial balance should be prepared with the available information by taking items at their book values. Any difference found in the trial balance is the profit or loss made by the company during the period the company did not maintain books of accounts.

Illustration 3: A compulsory winding up order was made against Mayoorti Ltd. on 31st January 2015. The following particulars are given:

Cash in hand	Rs. 130
Debtors (estimated to produce Rs. 4680)	Rs. 5200
Land and Building (estimated to produce Rs. 62400)	Rs. 78000
Furniture	Rs. 26000
Unsecured Creditors	Rs. 26000
Debentures (Secured on Land and Building)	Rs. 54600
Debentures (Secured on floating charge)	Rs. 13000
Preferential Creditors	Rs. 7800
Share Capital – 4160 shares of Rs. 100 each	Rs. 416000

Estimated liability for bills discounted was Rs. 7800, estimated to rank at Rs. 7800. Other contingent liabilities were Rs. 15600, estimated to rank at Rs. 15600.

The company was formed on 1st January 2010 and has made losses of Rs. 408070. Prepare Statement of Affairs and Deficiency Account.

Solution:

Statement of Affairs of Mayoori Ltd.
as on 1st January 2015

					Estimated Realisable Value (Rs.)
Assets not specifically pledged (as per list 'A')					
Cash in Hand					130
Debtors					4680
Furniture					26000
					30810
Assets specifically pledged (as per list 'B')					
	(a) Estimated realisable values (Rs.)	(b) Due to Secured Creditors (Rs.)	(c) Deficiency ranking as unsecured (Rs.)	(d) Surplus carried to last column (Rs.)	
Land and Building	62400	54600	-----	7800	
Total	62400	54600	-----	7800	
Estimated surplus from assets specifically pledged					7800
Estimated total assets available for preferential creditors, debenture holders secured by a floating charge, and unsecured creditors (carried forward)					38610
SUMMARY OF GROSS ASSETS					
Gross realisable value of assets specifically pledged				Rs. 62400	
Other Assets				Rs. 30810	
Gross Assets				<u>Rs. 93210</u>	
Gross Liabilities (Rs.)	Liabilities (to be deducted from surplus or added to deficiency as the case may be)				
54600	Secured creditors (as per list 'B') to the extent to which claims are estimated to be covered by assets specifically pledged item (a) or (b) whichever is less [insert in Gross Liabilities column only]				

			7800
7800	Preferential creditors (as per list 'C')		
	Estimated balance of assets available for debenture holders secured by a floating charge and unsecured creditors.		30810
			13000
13000	Debenture holders secured by a floating charge (as per list 'D'):		
	Estimated Surplus as regards debenture holders		17810
	Unsecured creditors (as per list 'E')		
	Unsecured Creditors	26000	
	Liability for Bills Discounted	7800	
49400	Contingent Liabilities	15600	49400
124800	Estimated Deficiency as regards creditors (being difference between Gross Assets and Gross Liabilities)		31590
	Issued and Called-up Capital:		
	4160 Equity Shares of Rs. 100 Each		416000
	Called-up (as per list 'G')		447590
	Estimated Deficiency as regards members (as per list 'H')		

Deficiency Account (List H)

		Rs.
<i>Items contributing to Deficiency:</i>		
Excess of capital and liabilities over assets		408070
Estimated losses now written off for which provision has been made for the purpose of preparing the statement:		
Land and Building	15600	
Debtors	520	
Contingent liabilities (7800 + 15600)	23400	39520
		447590
<i>Items reducing Deficiency:</i>		
Deficiency as shown by the Statement of Affairs		Nil
		447590

Liquidator's Final Statement of Account

The main job of liquidator is to collect the assets of the company and realise them and distribute it among right claimants. He maintains a cash book for recording the receipts and payments and submit an abstract of cash book to the court (in case winding up by the Tribunal), and to the company (in case of voluntary winding up). The liquidator also prepares an account of winding up. Such an account is called as Liquidator's Final Statement of Account.

All the receipts are shown on the debit side of this account. They include the following:

- a) Amount realised on sale of assets.
- b) Amount received from delinquent directors and other officers of the company.

- c) Contributions made by the contributories.

On the credit side of this account the following payments are shown in the given order:

- a) Payment of secured creditors and dues to workmen upto their claim or upto the amount of securities held by secured creditors.
- b) Cost of winding up (legal charges).
- c) Liquidator's remuneration.
- d) Payment to creditors having a floating charge on the assets of the company.
- e) Payment of preferential creditors.
- f) Payment of unsecured creditors.
- g) Amount paid to preference shareholders.
- h) Amount paid to equity shareholders.

In the preparation of Liquidator's Final Statement of Account, the principle of double entry is not involved. It is only a statement although presented in the form of an account.

Form of Liquidator's Final Statement of Account

Receipts	Amount Rs.	Payments	Amount Rs.
Assets:		Legal Charges	
Cash at Bank		Liquidator's remuneration:	
Cash in Hand		% on amount realised	
Marketable Securities		% on amount distributed	
Bills Receivables		Liquidation Expenses or Cost of	
Trade Debtors		Winding up	
Loans and Advances		Debenture holders or other	
Stock in Trade		creditors having a floating	
Work in Progress		charge on the assets of the	
Freehold Property		company	
Leasehold Property		Preferential Creditors	
Plant and Machinery		Other Unsecured Creditors	
Furniture, Fittings, Utensils etc.		Preference Shareholders	
Patents, Trade Marks etc.		(Refund of Capital)	
Investments other than		Equity Shareholders	
Marketable Securities		(Refund of Capital)	
Surplus from Securities			
Unpaid calls at commencement of			
winding up			
Amount received from calls on			
contributories made in the			
winding up			
Other Property			

Liquidator's Remuneration or Commission

A liquidator gets remuneration in the form of commission. It is paid as a percentage of the assets realised as well as a certain percentage of the payments made to unsecured creditors. The following points are relevant while calculating liquidator's remuneration:

1. **Commission on assets given as securities to secured creditors** – The liquidator gets commission on the surplus from such assets left after making the payment of secured creditors because he makes an effort of realising the surplus of such assets from secured creditors. However, if he sells the assets himself, he gets commission on the total proceeds of such assets.
2. **Cash and Bank Balance** – If the liquidator is to get a commission on cash and bank balance unless otherwise stated.
3. **Unsecured Creditors** – If the liquidator is to get a commission on amount paid to unsecured creditors, unsecured creditors will also include preferential creditors for the purpose of calculation of remuneration unless otherwise stated.

If amount available is sufficient to make the full payment of unsecured creditors, the commission can be calculated as follows:

$$\text{Commission} = \frac{\text{Amount due to unsecured creditors} \times \% \text{ of commission on creditors}}{100}$$

If the amount available is not sufficient to make the full payment on secured creditors, the commission can be calculated as follows:

$$\text{Commission} = \frac{\text{Amount available for unsecured creditors} \times \% \text{ of commission}}{100 + \% \text{ of commission}}$$

Illustration 4: A liquidator is entitled to receive remuneration @ 3% of the assets realised and 2% on the amount distributed among the unsecured creditors. The assets realised Rs. 8400000 against which payment was made as under:

Cost of liquidation Rs. 60000, Preferential Creditors Rs. 180000, Secured Creditors Rs. 4800000 and Unsecured Creditors Rs. 3600000.

Calculate the liquidator's remuneration.

Solution:

Calculation of Liquidator's Remuneration

	Rs.
a. Liquidator's commission on assets realised (8400000x3/100)	252000
b. Liquidator's commission on amount paid to preferential creditors (180000x2/100)	3600
c. Liquidator's commission on amount distributed among unsecured creditors (3104400x2/102)	60871
Total Liquidator's Remuneration	316471

Working Note:

Calculation of amount available to Unsecured Creditors

	Rs.	Rs.
Total assets realised		8400000
Less: Cost of liquidation	60000	
Preferential creditors	180000	
Secured creditors	4800000	
3% commission on assets realised	252000	
2% commission on amount paid to preferential creditors	3600	5295600
Amount available to unsecured creditors		3104400

Illustration 5: Prepare the Liquidator's Final Statement of Account of a limited company went into voluntary liquidation, with the following liabilities:

	Rs.	Rs.
Trade Creditors		16800
Bank Overdraft		28000
Capital:		
14000 Preference shares of Rs. 100 each, Rs.7 called up		98000
14000 Equity shares of Rs. 10 each, Rs. 9 called up	126000	
Less: Calls in arrears	2800	123200
Cash received in anticipation of calls:		
On preference shares	33600	
On equity shares	5600	39200

The assets realised Rs. 280000. Cost of liquidation amounted to Rs. 2800. Liquidator's remuneration Rs. 4200.

Solution:

Liquidator's Final Statement of Account

Receipts	Amount Rs.	Payments	Amount Rs.
Assets Realised	280000	Cost of Liquidation	2800
Calls in Arrears	2800	Liquidator's Remuneration	4200
		Bank Overdraft	28000
		Trade Creditors	16800
		Calls in advance	39200
		Preference Shareholders	98000
		Equity Shareholders	
		@ Rs. 6.70 per share (Bal. Fig)	93800
	282800		282800

Illustration 6: The liabilities and assets of Kaloor Ltd as on 31st March 2015 are as follows:

Liabilities	Amount Rs.	Assets	Amount Rs.
Share Capital:		Land and Buildings	320000
Authorised and Subscribed:		Plant and Machinery	800000

6400, 6% Preference Shares of Rs. 100 each	640000	Patents	512000
3200 Equity shares of Rs. 100 each, Rs. 75 per share paid up	240000	Stock at Cost	176000
9600 Equity Shares of Rs. 100 each, Rs. 60 per share paid up	576000	Sundry Debtors	352000
5% Debentures (having a floating charge on all assets)	320000	Cash at Bank	96000
Interest outstanding on Debentures (also secured as above)	16000		
Creditors	464000		
	2256000		2256000

On that date, the company went into liquidation. The dividends on preference shares were in arrear for two years. The arrears are payable on liquidation as per the Articles of the company. Creditors include a loan of Rs. 160000 on mortgage on land and building. The assets realised as under:

Land and building Rs. 384000, Plant and machinery Rs. 640000, Patents Rs. 96000, Stock Rs. 192000 and Sundry debtors Rs. 256000.

The cost of liquidation is amounted to Rs. 34880. The liquidator is entitled to a commission of 3% on all assets realised (except cash at bank) and a commission of 2% on amount distributed among unsecured creditors. Preferential creditors amounted to Rs. 48000. All payments were made on 30th September 2015.

Prepare the Liquidator's Final Statement of Account.

Solution:

Kaloor Ltd

Liquidator's Final Statement of Account

Receipts	Amount Rs.	Payments	Amount Rs.
Assets Realised:		Secured Creditors	160000
Cash at Bank	96000	Cost of Liquidation	34880
Sundry Debtors	256000	Liquidator's	
Stock	192000	Remuneration:	
Patents	96000	On assets realised	
Plant and Machinery	640000	except cash	
Land and Building	384000	(1568000x3%)	47040
	1664000	On payment to	
		preferential creditors	
		(48000x2%)	960
		On payment to	
		unsecured creditors	
		(256000x2%)	5120
			53120

	5% Debentures	320000	
	Add: Interest for 1 ½ years upto 30 th Sep 2015 @5%	24000	344000
	Preferential Creditors		48000
	Unsecured Creditors		256000
	Preference Shareholders:		
	Capital	640000	
	Arrears of Dividend	76800	716800
	Equity Shareholders:		
	Rs. 15.25 per share on 3200 shares, Rs. 75 paid up	48800	
	Re. 0.25 per share on 9600 shares, Rs. 60 paid up	2400	51200
	1664000		1664000

Working Notes:

Calculation of Unsecured Creditors:

Total Creditors given	Rs.	Rs.
Less: Mortgage Loan	160000	464000
Preferential Creditors	48000	208000
Unsecured Creditors		256000

Calculation of Payment of Capital to Equity Shareholders:

Total Equity share capital paid up (Rs. 240000+ Rs. 576000)	Rs.
Less: Balance available after payment to preference shareholders (1664000-160000-34880-53120-344000-48000-256000-716800)	816000
Loss to be borne by equity shareholders	51200
	764800

Loss per Equity Share = $764800/12800 = \text{Rs. } 59.75$

Amount repayable to 3200 equity shareholders = (Rs. 75 – Rs. 59.75)

= Rs. 15.25 per share

Amount repayable to 9600 equity shareholders = (Rs. 60 – Rs. 59.75)

= Re. 0.25 per share

Illustration 7: Munna Ltd. went into voluntary liquidation. Prepare the liquidator's final statement of account, from the following details regarding liquidation:

Share Capital:

- 3400, 8% Preference shares of Rs. 100 each, fully paid up.
- Class A – 3400 Equity shares of Rs. 100 each, Rs. 75 paid up.
- Class B – 2720 Equity shares of Rs. 100 each, Rs. 60 paid up.
- Class C – 2380 Equity shares of Rs. 100 each, Rs. 50 paid up.

Assets including machinery realised Rs. 714000. Cost of liquidation amounted to Rs. 25500.

Munna Ltd. has borrowed a loan of Rs. 85000 from Noor & Co. against the mortgage of machinery (which realised Rs. 136850). In the books of the company salaries of four clerks for four months at the rate of Rs. 510 per month and salaries of four peons for three months at the rate of Rs. 255 per month are outstanding. In addition to this, the company's books show the creditors worth Rs. 148580.

Solution:

Munna Ltd. Liquidator's Final Statement of Account			
Receipts	Amount Rs.	Payments	Amount Rs.
Assets Realised	714000	Secured Creditors (Loan)	85000
Proceeds of call @ Re. 1 per share on 2380 equity shares of class C	2380	Cost of Liquidation	25500
		Preferential Creditors	11220
		Unsecured Creditors	148580
		Preference Shareholders	340000
		Equity Shareholders:	
		Rs. 24 per share on 3400 equity shares of class A	81600
		Rs. 9 per share on 2720 equity shares of class B	24480
	716380		716380

Working Notes:

Calculation of Preferential Creditors:

	Rs.
Salary for 4 clerks @ Rs. 510 per month (510x4x4)	8160
Salary for 4 peons @ Rs. 255 per month (255x4x3)	3060
Preferential Creditors	11220

Calculation of amount returnable or receivable to equity shareholders:

	Rs.	Rs.
Assets Realised		714000

Less: <i>Payments</i>		
Secured Creditors	85000	
Cost of Liquidation	25500	
Preferential Creditors	11220	
Unsecured Creditors	148580	270300
Balance available for shareholders		443700
Less: Capital to be returned to Preference Shareholders		340000
Amount available for Equity Shareholders		103700
Less: <i>Equity Shares paid up</i>		
Class A – 3400 Equity shares @ Rs. 75 each	255000	
Class B – 2720 Equity shares @ Rs. 60 each	163200	
Class C – 2380 Equity shares @ Rs. 50 each	119000	537200
Loss to be borne by Equity Shareholders		433500

Loss per equity share = Total Loss/ Total No. of equity shares

$$= 433500/8500$$

$$= \text{Rs. 51 per share}$$

	Class A Shares Rs.	Class B Shares Rs.	Class C Shares Rs.
Paid up amount per share	75	60	50
Less: Loss per share	51	51	51
Amount returnable or receivable to equity shareholders	24	9	-1

Receiver for Debentureholders

In case of liquidation of companies, the debentureholders may appoint an independent person as receiver to take over the assets specifically or generally charged in their favour. The receiver will realise such assets and after meeting his expenses, remuneration and making payment to claimants entitled to get payment in priority to the debentureholders, he will make payment to the debentureholders. The receiver will hand over the surplus, if any, to the liquidator of the company so that the latter may make the payment to the claimants who are to get the payment after the debentureholders. Thus, if a receiver is appointed two statements of accounts namely Receiver's Statement of Account and Liquidator's Final Statement of Account have to be prepared.

Illustration 8: The liabilities and assets of Bharath Ltd. as on 30th September 2015 as follows:

Liabilities	Amount Rs.	Assets	Amount Rs.
Share Capital:		Land and Building	285300
Issued – 11% Preference Shares		Sundry Current Assets	711000

of Rs. 10 each	180000	Expenses on issue of Debentures	3600
18000 Equity Shares of Rs. 10 each, fully paid up	180000		
9000 Equity Shares of Rs. 10 each, Rs. 7.50 paid up	67500		
13% Debentures	270000		
Mortgage Loan	144000		
Bank Overdraft	54000		
Trade Creditors	57600		
Income tax arrears (Assessment concluded in July 2015)			
AY 2013-14 37800			
AY 2014-15 <u>9000</u>	46800		
	999900		999900

Mortgage loan was secured against land and building. Debentures were secured by a floating charge on all the other assets. The company was unable to meet the payments and therefore the debentureholders appointed a receiver and this was followed by a resolution for member's voluntary winding up. The receiver for the debentureholders brought the land and building to auction and realised Rs. 270000. He also took charge of sundry assets of the value of Rs. 432000 and realised Rs. 360000.

The liquidator realised Rs. 180000 on the sale of the balance of sundry current assets. The bank overdraft was secured by a personal guarantee of two of the directors of the company and on the bank raising a demand, the directors paid off the dues from their personal resources.

Costs incurred by the receiver were Rs. 3600 and by the liquidator Rs. 5040. The receiver was not entitled to any remuneration but the liquidator was to receive 3% fee on the value of assets realised by him. Preference shareholders had not been paid dividend for period after 30th September 2013 and interest for the last half year was due to the debentureholders.

Prepare the Receiver's Statement of Account and the Liquidator's Final Statement of Account.

Solution:

Bharath Ltd.
Receiver's Statement of Account

Receipts	Amount Rs.	Payments	Amount Rs.
Sundry Assets Realised	360000	Cost of Receiver	3600

Surplus realised from mortgage: Sale proceeds of land and building 270000		Payment to Debentureholders: Principal 270000	
Less: Applied to discharge of mortgage loan 144000	126000	Add: Interest for ½ year @ 13% p.a. 17550	287550
	486000	Surplus handed over to Liquidator	194850
			486000

Bharath Ltd.
Liquidator's Final Statement of Account

Receipts	Amount Rs.	Payments	Amount Rs.
Surplus received from the Receiver	194850	Cost of Liquidation	5040
Sundry assets realised by Liquidator	180000	Liquidator's Remuneration @ 3% of assets realised (180000x3%)	5400
	374850	Payment to Preferential creditors (Income tax within 12 months)	46800
Amount realised from Contributories: From 9000 equity shareholders @ Rs. 2.17 per share.	19530	Payment to Unsecured Creditors: Trade Creditors 57600	
		Payment of amount due to directors for Bank Overdraft 54000	111600
		Payment to Preference Shareholders: Principal 180000	
		Arrears of dividend @ 11% p.a for 2 years 39600	219600
			388440
		Payment to Equity Shareholders: 18000 Shares fully paid @ Re. 0.33 per share	5940
	394380		394380

Working Notes:

Calculation of amount payable by partly paid shareholders:

	Rs.	Rs.
Amount available before call from partly paid shareholders		328050
Less: Amount payable to various claimants:		
Cost of liquidation	5040	
Liquidator's remuneration	5400	
Unsecured Creditors	111600	
Preference Shareholders	219600	341640
Deficiency		- 13590
Add: Total amount receivable from partly paid shareholders on the basis of notional call of Rs. 2.50 per share on 9000 shares		22500
Net Surplus after notional call		8910

Number of shares deemed fully paid = $18000 + 9000 = 27000$ shares.

Refund on each fully paid shares = $8910/27000 = \text{Re. } 0.33$ per share.

Call on partly paid shares = $\text{Rs. } 2.50 - \text{Re. } 0.33 = \text{Rs. } 2.17$ per share.

REVIEW QUESTIONS

A. Short Answer Type questions

9. Define liquidation of a company.
10. State the modes of winding up of a company.
11. Who is a contributory?
12. Who is a present member?
13. Who is a liquidator?
14. Who is a receiver for debentureholders?
15. What do you mean by Deficiency or Surplus Account?

B. Short Essay Type Questions

5. Briefly explain the circumstances when a company may be wound up by the Tribunal.
6. What are the types of contributories?
7. Write a note on preferential creditors.
8. How to prepare a statement of affairs?
9. How to calculate the liquidator's remuneration?
10. Write a note on Liquidator's Final Statement of Account

C. Practical Problems

1. The following information were extracted from the books of a limited company on 31st March 2015 on that date a winding up order was made:

	Rs.
Cash in hand	10000
Stock in trade (Estimated to produce Rs. 30000)	40000
Furniture and fittings (Estimated to produce Rs. 4200)	6000
Plant and machinery (Estimated to produce Rs. 31200)	30000
Freehold land and buildings (Estimated to produce Rs. 90000)	60000
Book debts (Estimated to produce Rs. 10400)	12400
Unsecured creditors	140000
Preferential creditors	4000
Creditors fully secured (Value of securities Rs. 22000)	18000
Creditors partly secured (Value of securities Rs. 12000)	20000

Bank overdraft secured by a second charge on all assets of company	16000
10% Debentures secured by floating charge (interest paid to date)	100000
Equity share capital – 12000 shares of Rs. 10 each	120000
11% Preference share capital – 13000 shares of Rs. 10 each	130000
Calls in arrears on equity shares (Estimated to produce Rs. 2000)	5000

Prepare a Statement of Affairs.

(Answer: Gross Assets – Rs. 211800; Estimated Deficiency as regards members – Rs. 317200).

2. The following information were extracted from the books of a limited company on 31st December 2014 on that date a winding up order was made:

	Rs.
Equity share capital – 40000 shares of Rs. 10 each, Rs. 8 called up	320000
Preference share capital – 4000 shares of Rs. 100 each, fully paid	400000
Calls in arrears on equity shares (Estimated to produce Rs. 1200)	2000
15% Debentures secured by first floating charge on assets	400000
Bank overdraft secured by a second charge on all assets of company	200000
Investments (Estimated to produce Rs. 120000)	160000
Land and buildings (Estimated to produce Rs. 160000)	80000
Plant and machinery – secured to creditors (Estimated to realise Rs. 160000)	240000
Rent and taxes	8000
Wages and salaries	6000
Bills payable	48000
Sundry Creditors	120000
Bills receivable (Estimated to realise Rs. 4000)	12000
Debtors (Estimated to realise 60%)	280000
Bills discounted (Rs. 60000 likely to rank)	16000
Contingent liability likely to accrue	12000
Cash in hand	6400
Stock in trade (Estimated to produce Rs. 76000)	120000

Entry for accrued salary of Rs. 8000 and rent of Rs. 4000 has still to be made in the books. Prepare a statement of affairs and deficiency account.

(Answer: Gross Assets – Rs. 695600; Estimated Deficiency as regards to members – Rs. 965600).

3. The capital of Dinesh Ltd. was as under:

- (a) 2000 equity shares of Rs. 100 each fully paid.
- (b) 1500 equity shares of Rs. 100 each, Rs. 80 per share paid up.
- (c) 500 preferences shares of Rs. 100 each, fully paid, and
- (d) 500 deferred shares of Rs. 100 each, Rs. 80 per share paid up (these shares, under the Articles are to be paid after satisfying the claims of equity shareholders).

The various creditors amounted in all to Rs. 50000 including liquidator's remuneration of Rs. 1250. The liquidator has made a call on the remaining Rs. 20 on the deferred shares which were paid in full. He also realised all assets amounting to Rs. 95500. A call of Rs. 15 per share was made on the equity shares which were partly paid up. This was paid in full with the exception of that on 50 shares.

Prepare the liquidator's final statement of account, showing the return of money to the shareholders.

(Answer: Payment to fully paid equity shareholders – Rs. 20000; Payment to partly paid equity shareholders – Rs. 7250; Calls on deferred shares – Rs. 10000).

MODULE – 4

• VOYAGE ACCOUNTS

• FARM ACCOUNTS

LESSON 6

VOYAGE ACCOUNTS

Meaning of Voyage Accounting

The method of accounting followed by shipping companies is known as Voyage Accounting. Shipping companies prepare their accounts periodically and also prepare the results of each voyage separately. Shipping companies carry goods from one place to another. Some companies carry passengers also in addition to goods from one place to another place. Each voyage covers both outward and return journey of vessel.

Voyage Account

In order to ascertain the result of operating a ship's voyage, Voyage Account is prepared. The Voyage Account is a revenue account. Voyage Account is similar to an ordinary P&L A/c. It is important to note that there is no difference in the manner of preparing accounts period-wise and voyage-wise.

All expenses connected with the voyage, such as port charges, wages and salaries of the crew, captain and other staff, transshipment, agency fees, provisions, loading and unloading charges, bunker and harbour wages, freight and insurance, insurance of the ship on a time policy according to duration of voyage, depreciation arising as a result of the journey, address commission paid to brokers for freight for the ship, commission to captain on net profit etc. are debited to concerned Voyage Account. All incomes such as freight on cargo carried, passagemoney, primage etc. are credited to this account.

Expenditures and Incomes relating to Voyage Accounts

Voyage Account is debited usually with the following expenses:

1. Bunker Cost

This is the expenditure incurred on fuel oil, diesel, coal and fresh water used during the voyage. Now-a-days oil and diesel are used in place of coal. The bin or storing place of coal is referred to as bunker. Hence these are called as bunker costs.

2. Port Charges

Port is used by the shipping companies for loading and unloading of goods and parking of ships, hence the charges paid for these purposes are known as port charges.

3. Depreciation

Depreciation of the ship for the period of voyage is calculated and charged to the Voyage Account.

4. Insurance

Insurance premium of cargo must be entirely debited to the concerned Voyage Account whereas the insurance charges of the ship are charged proportionately to each voyage on the basis of time of voyage.

5. Address Commission and Brokerage

This is payable to the brokers and agents who help the shipping company in procurement of cargo, i.e., freight or business. This is calculated at a certain per cent of the freight earned including the primage or surcharge and debited to Voyage Account. Address commission is payable to the Charterer whereas brokerage is payable to the agent of the charterer.

6. Stevedoring Charges

The expenses which are incurred in loading of goods on the ships and unloading of goods from the ships are known as stevedoring charges.

7. Port Charges

These are the charges paid to port authorities for allowing the ship to use the port either for loading or unloading the cargo.

8. Stores

If any stock of stores is brought for use during the voyage, then on ship's return the stores in hand must be valued and brought into account. Stores consumed are to be debited.

8. Salaries and wages of the crew, captain and other staff.

9. Harbour charges

10. Manager's commission, if any.

Voyage Account is credited usually with the following incomes:

1. Freight

The amount which is charged by the shipping companies for taking goods or cargo from one place to another is called freight. It is an income.

2. Primage

It is additional freight just like surcharge on freight originally collected for the captain of the ship. It is treated as income of the shipping company.

3. Passage Money

Fare collected from the passengers travelled in addition to the fare collected for merchandise.

4. Closing Stocks of Coal, Fuel etc.

Excess of credit side of Voyage Account over its debit side is profit on the voyage. Excess of debit side of Voyage Account over its credit side is loss on the voyage. This profit or loss is transferred to General Profit and Loss Account of the shipping company.

Voyage in Progress

A part of voyage is incomplete at the end of accounting period is called voyage in progress. Income and expenditure for such part of voyage are calculated on most appropriate basis and carried forward to subsequent period to ascertain the correct profit.

Illustration 1: Ocean Shipping Ltd gives the following details in connection with a voyage, commenced from port W on 1st November 2014. The voyage was completed on 31st December 2014 by the arrival of ship at port Z.

5000 tons and 1250 tons were loaded at port X for port Z and port Y respectively. Another 750 tons were loaded at Y for Z. the freight charges were as follows:

Port W to port Z – Rs. 100 per ton

Port W to port Y – Rs. 80 per ton

Port Y to port Z – Rs. 50 per ton

The freight is subject to 10% primage, address commission @ 5% and brokerage @ 3%. The freight was insured @ $\frac{1}{2}$ % and the hull was insured for the voyage @ 1%. Depreciation is provided @ 5% per annum.

Cost of the ship is Rs. 30,00,000. The expenses at different ports were as under:

	W (Rs.)	X (Rs.)	Y (Rs.)	Z (Rs.)
Port charges	12500	2500	7500	7500
Coal	45000	-----	10000	-----
Captain's expenses	3000	2000	1500	2250
Harbour wages	10000	-----	7500	6250

Stores purchased at the commencement amounted to Rs. 20000. Opening stock of stores was Rs. 12500 and closing stock is estimated at Rs. 5000. Opening stock and closing stock of coal were Rs. 3750 and Rs. 11250 respectively. Salaries and wages of sailors etc. amounted to Rs. 30000 per month.

Prepare the voyage account for the period ended 31st December 2014.

Solution:

Voyage Account
for the period ended 31st December 2014

	Rs.		Rs.
To Address commission (701250x5%)	35063	By Freight: W to Z (5000x100)	500000
To Brokerage (701250x3%)	21038	W to Y (1250x80)	100000
To Insurance on freight (701250x1/2 %)	3506	Y to Z (750x50)	37500
To Insurance on hull (3000000x1%)	30000	By Primage (637500x10%)	63750
To Depreciation (3000000x5%x2/12)	25000		63750
To Port Charges (12500+2500+7500+7500)	30000		
To Coal consumed [3750+(45000+10000)-11250]	47500		
To Captain's expenses (3000+2000+1500+2250)	8750		
To Harbour wages (10000+7500+6250)	23750		
To Stores consumed (12500+20000-5000)	27500		
To Salaries & wages (30000x2)	60000		
To Net Profit	389143		
	701250		701250

Illustration 2: Maharaja Shipping Co. Ltd. of Mumbai acquired a new ship at a cost of Rs. 7500000. The ship was ready for service on 1st January 2014. An insurance policy was taken @ 2% per annum on the ship. Freight was insured at Rs. 20000 per annum. During 3 months ended 31st March 2014, the ship was completed one round trip to Kolkata and was half through the second trip (single way) to Kolkata.

The ship carried the following cargo:

To Kolkata - 18000 tons @ Rs.300 per ton

From Kolkata - 20000 tons @ Rs. 270 per ton

To Kolkata – 24000 tons @ Rs. 250 per ton
 Commission @ 5% was paid to agents in addition to address commission @ 1%. The other expenses were as follows:

Salaries and wages of crew	Rs. 1600000
Fuel	Rs. 800000
Sundry stores	Rs. 160000
Port dues (Mumbai Rs. 140000, Kolkata Rs. 100000)	Rs. 240000
Stevedoring @ Rs. 20 per ton	Rs. 1240000
Share of overheads for the ship for the period	Rs. 500000
Provide depreciation for the period @ 5% per annum.	

Prepare the consolidated voyage account for the period of three months ending 31st March 2014.

Solution:

Maharaja Shipping Co. Ltd
Voyage Account

for the period from 1st January 2014 to 31st March 2014

	Rs.		Rs.
To Insurance on ship (7500000x2%x3/12)	37500	By Freight: 18000x300	5400000
To Insurance on freight (20000x3/12)	5000	20000x270	5400000
To Address commission (16800000x1%)	168000	24000x250	6000000
To Agent's commission (16800000x5%)	840000	By Voyage in Progress	1525917
To Salaries & wages	1600000		
To Fuel	800000		
To Sundry Stores	160000		
To Port dues	240000		
To Stevedoring	1240000		
To Overheads	500000		
To Depreciation (7500000x5%x3/12)	93750		
To Provision for incomplete Voyage (Freight)	6000000		
To Net Profit	6641667		
	18325917		18325917

Working Notes:

Calculation of voyage in progress

	Rs.
Insurance on ship (1/5)	7500
Insurance on freight (1/5)	1000
Address commission (6000000x1%)	60000
Agent's commission (6000000x5%)	300000
Salaries & wages (1/5)	320000
Fuel (1/5)	160000
Sundry Stores (1/5)	32000
Port dues (at Mumbai 140000x1/3)	46667
Stevedoring (24000 tons @ Rs. 20)	480000
Overheads (1/5)	100000
Depreciation (1/5)	18750

1525917

- The ship started from Mumbai to Kolkata and reached Mumbai in the first round trip.
- In second round trip it again started from Mumbai (voyage in progress).
- When the ship started from Mumbai, it did only loading. On returning it did unloading and loading. So the stevedoring charges are apportioned at a reasonable basis (1/3) for incomplete voyage.

REVIEW QUESTIONS

A. Short Answer Type questions

16. What do you mean by voyage account?
17. What is address commission?
18. What do you mean by stevedoring charges?
19. What is primage?
20. What do you mean by voyage in progress?

B. Short Essay Type Questions

11. Explain the expenditures and incomes relating to voyage accounts

C. Essay Type Questions

4. Write an essay on voyage accounts.

D. Practical Problems

1. S.S. Ganga sailed from Kolkata on 1st February 2015 and arrived at Chennai Port on 31st March 2015 via Vishakhapatnam port on Voyage No. 302. The following goods were loaded: 1000 M.T. and 200 M.T at Kolkata port for Chennai port and Vishakhapatnam port respectively. Another 500 M.T were loaded at Vishakhapatnam for Chennai. The freight charges were:

Kolkata port to Chennai port	Rs. 600 per M.T
Kolkata port to Vishakhapatnam port	Rs. 500 per M.T
Vishakhapatnam port to Chennai port	Rs. 400 per M.T

The freight is subject to 10% primage, 5% address commission and 2.5% brokerage. The freight was insured at $\frac{1}{2}$ %. The hull was insured for the voyage at 1%. Depreciation was provided at 3% p.a. The cost of the ship is Rs. 1 crore. The following were the expenses incurred at different ports:

	Kolkata Rs.	Vishakhapatnam Rs.	Chennai Rs.
Port charges	36000	20000	20000
Coal	100000	30000	-----
Captain's contingencies	7000	2000	10000
Harbour wages	10000	20000	15000

Stores purchased for the voyage amounted to Rs. 50000. Opening stock of stores was Rs. 40000 and closing stock was estimated at Rs. 30000. Stock of coal at close was estimated at Rs. 30000 as against stock of Rs. 10000 at the beginning. The ship will not come back to Kolkata port in the near future as part of the voyage programme. Salaries and wages amounted to Rs. 80000 p.m.

Prepare this Voyage No. 302 account.

(Answer: Profit – Rs. 290800)

LESSON 7

FARM ACCOUNTS

Introduction to Farm Accounting

Farm accounting is intended to keep a record of farming activities. Farming activities include agriculture, horticulture, animal husbandry, poultry farming, pisciculture, dairy, sericulture, nurseries for plants, fruits & flowers etc. Farm accounting is also called as Farm Book keeping.

The following are some of the definitions of farm accounting:

Farm accounting is defined as an application of the accounting principles to the business of farming.

Farm accounting can be defined as “the art as well as the science of recording in the books business transactions in regular and systematic manner so that their nature, extend and financial affects can be readily ascertained at any time of the year”.

In India, Small farmers, mostly being illiterate, do not maintain accounts of agricultural operations. Medium & big farmers keep accounts only for ascertaining amounts receivable & payable. Farms in corporate sector maintain accounts, as they have to keep accounts under the Companies Act.

In India, farm accounting is in its infant stage and not popular as it is in advanced countries due to the following reasons:

1. Limited number of organised farms.
2. Mostly based on small scale operation of the household.
3. Low level of education of small & average farmers.

Characteristics of Farm Accounting

1. **Notional Transactions** – Some of the crops and products of the farm are consumed by the family of the farm owner. Such consumption is treated as income of the farm and drawings of the farm owner. The transactions between the farm and farm household are called notional transactions.
2. **A single bank account may be opened both for private & business purposes** - Being so, private transactions should be segregated from business transactions so that profit or loss and financial position of farming activities may be ascertained.
3. **Family provides labour for the farm** – Valuation of such labour should be made and added to the cost of production for ascertaining correct cost of production or profit.
4. **Farming activities are subject to natural calamities** – To meet the losses due to draught, flood, diseases etc. insurance policies for various farming activities should be taken.
5. **Valuation of farm inventory is a difficult task** – Inventory valuation is very difficult especially in case of standing crops, cattle, poultry etc.

6. **Exchange transactions-** Output of one farming activity may become the input of another farming activity. For example, a part of crop produced may be used in cattle rearing, poultry farming etc. Such transactions are called as exchange transactions and should be valued at the opportunity cost (market price).

Objectives of Farm Accounting

1. True cost of each farming activity can be ascertained. So farm practices can be improved to reduce the cost of production.
2. Profit on each line of farming activity can be ascertained. It helps to ensure better managerial control.
3. It is helpful in maintenance of proper accounting records of farming activities.
4. Return on capital employed in farming activities can be ascertained.

Importance of Farm Accounting

1. It permits the farmer to find out the size of the income which is derived from the farm.
2. To know the total value of the farm business and to know which part is actually owned by the farmer and which by others.
3. Farm accounts provide the indispensable tool for farm management. In other words, accounting is needed to obtain and to maintain the most profitable use of farm resources.
4. To detect loss or theft of cash or stock.
5. To provide the necessary data for a correct income tax assessment.
6. To claim expenses for work done by others.

Recording of Farming Transactions

Farm accounting can be done on double entry system. All subsidiary books and ledger can be maintained for recording farm transactions. As farming businesses are mostly on cash basis, single entry system of accounting can also be followed. To obtain cost and profit of each product detailed accounts should be kept for different crops like rice, wheat, cotton jute etc. Each crop account is debited with opening stock and expenses and credited with sale proceeds and closing stock. Common costs can be apportioned suitably among different crops. The balance of crop account will be the profit on that crop.

In case of livestock, separate accounts should be maintained for each type of livestock. All the costs relating to livestock are debited and sale proceeds and other incomes are credited to the livestock account. The resultant figure shall be profit or loss.

Generally a Farm Account is prepared for all the farm items. A Crop Account is prepared for all crops like wheat, rice, jute, cotton, vegetables etc. A Dairy Account can be maintained for all types of livestock, milk, butter, cream etc. All activities relating to poultry farming can be recorded in a Poultry Account.

For proper ascertainment of profit & financial position, farmer should value inventories and other assets. The basis of inventory valuation should be at cost or market price whichever less is. It is very difficult to ascertain the cost of livestock and standing crops. In such a case, as a

general practice, the value of livestock is taken as 75% of market price and the crops are valued at 85% of market price.

The livestock may be fixed asset or current asset. It is a fixed asset when livestock are kept for crop purposes. But, these are taken as current assets when livestock are kept for trading purposes.

Proper depreciation should be provided for farm machinery, equipment and farm buildings in order to ascertain the correct profit or loss from farming activities.

As the farming business is family type the item of drawings should be carefully recorded. Apart of cash drawings there may be consumption of crop, dairy or poultry products. The following entry is passed to record the consumption of farm products by farm proprietor:

Drawings A/c Dr

 To Farm A/c

When farm products are consumed by labourers or paid in kind:

Wages A/c Dr

 To Farm A/c

Books of Accounts

1. Cash Book for keeping a record of cash transactions.
2. Debtors & Creditors Register for keeping a record of credit transactions.
3. Stock Register for keeping a record of details of input goods and output goods, sales, utilisation, wastage and balance of stock.
4. Fixed Assets Register for keeping a record of cost of fixed assets, depreciation on fixed assets and balance of fixed assets.
5. Loan Register for keeping a record of borrowings from banks, friends, relatives and other agencies along with interest paid and payables.
6. Register for Notional Transactions for making a record of transactions between farm and farm household.
7. Cost Analysis Register for keeping a record of cost of each farming activity for ascertaining profit of each farming activity.

Expenses and Incomes of Farming Activities

A. Crops

Expenses:

1. Seeds
2. Fertilisers
3. Pesticides
4. Irrigation expenses
5. Wages
6. Running and maintenance cost of agricultural machinery and equipment
7. Depreciation on fixed assets
8. Interest on borrowed capital
9. Rent on agricultural land
10. Notional rent, interest on owned capital or wages
11. Land revenue, cesses and other taxes

Incomes:

1. Sale of main products & by products
2. Value of farm products consumed by family members
3. Value of output transferred to other farming activity
4. Value of output exchanged for input

B. Poultry**Expenses:**

1. Cost of chickens
2. Cost of feed
3. Cost of stocks like hay, packing boxes etc.
4. Maintenance cost of poultry sheds
5. Salaries & wages

Incomes:

1. Sale of eggs
2. Sale of chickens, broilers & hens
3. Sale of poultry excrements as manures

C. Dairies**Expenses:**

1. Cattle feed & hay
2. Cost of cultivation of feed crop
3. Salaries & wages
4. Cost of insecticides
5. Cost of maintaining milk processing facilities

Incomes:

1. Sale of milk
2. Sale of milk products
3. Sale of calves
4. Sale of slaughtered cattle

D. Fisheries

Expenses:

1. Cost of spawn like seeds
2. Cost of water
3. Cost of fish feed
4. Tank maintenance cost
5. Catching expenses
6. Salaries & wages

Incomes:

1. Sale of fish

Final Accounts of Farm Activities

The final accounts of farming activities can be prepared under both single entry system and double entry system.

Single Entry System

Under single entry system, opening statement of affairs showing assets and liabilities at the beginning of the year and closing statement of affairs showing assets and liabilities at the end of the year are prepared and thereby profit or loss for the year is ascertained.

Double Entry System

Under double entry system, a trial balance can be prepared which becomes the basis for preparation of Farm Account or Trading and Profit and Loss Account and Balance Sheet. Nominal accounts are closed by transferring them to Farm Account or Trading and Profit and Loss Account and balances of personal and real accounts are shown in Balance Sheet. Balance of Farm Account or Trading and Profit and Loss Account being profit or loss is transferred to Capital Account or Farm Household Capital Account.

Illustration 1: Prepare a Crop Account from the following information to ascertain the profit made by the farm's crop division.

	Opening Stock (Rs.)	Closing Stock (Rs.)
Wheat	15000	12000

Seeds	3000	2100
Fertilisers	4500	2400

Purchases:

Seeds	Rs. 1800
Fertilisers	Rs. 2700

Wages:

Paid in cash	Rs. 20400
Paid in kind (Wheat)	Rs. 13800

Sale of Wheat	Rs. 106200
Wheat consumed by proprietor	Rs. 4800
Depreciation on farm machinery	Rs. 6000

Solution:

Crop Account

To Opening Stock:		By Sale (Wheat)	106200
Wheat	15000	By Wages in kind (Contra)	13800
Seeds	3000	By Drawings (Wheat consumed)	4800
Fertilisers	<u>4500</u>	By Closing Stock:	
	22500	Wheat	12000
To Purchases:		Seeds	2100
Seeds	1800	Fertilisers	<u>2400</u>
Fertilisers	<u>2700</u>		16500
	4500		
To Wages:			
Cash	20400		
Kind(Contra)	<u>13800</u>		
	34200		
To Depreciation on machinery	6000		
To Crop profit transferred to P&L A/c	<u>74100</u>		
	141300		
			<u>141300</u>

Illustration 2: From the following trial balance of a farmer, prepare Trading and Profit and Loss Account for the year ended 31st December 2014 and Balance Sheet as on that date.

<i>Debit Balances</i>	<i>Rs.</i>	<i>Credit Balances</i>	<i>Rs.</i>
Opening Stock:		Sales:	
Livestock	244000	Milk	121600
Paddy	16000	Paddy	210400
Cattle feed	11200	Livestock	36000
Fertilisers	8800	Creditors	47200
Purchases:		Capital	684800
Livestock	46400		
Fertilisers	9600		
Seeds	4800		
Cattle feed	27200		
Crop expenses:			

Labour	28800		
Other direct expenses	3200		
Livestock Expenses:			
Medicines	4800		
Labour	28800		
Dairy expenses	6400		
General expenses	48000		
Tractor	144000		
Land	400000		
Cash in hand and at bank	68000		
	1100000		1100000

Also consider the following adjustments:

a. Closing stock:

Livestock	Rs. 240000
Paddy	Rs. 12000
Cattle feed	Rs. 7200
Fertilisers	Rs. 4800

b. The proprietor has consumed the following items out of his farm output:

Milk	Rs. 19200
Paddy	Rs. 4800

c. Provide 10% depreciation on tractor.

Solution:

Farm Account (Trading and Profit and Loss Account)
for the year ended 31st December 2014

To Opening Stock:			By Sales:		
Livestock	244000		Milk	121600	
Paddy	16000		Paddy	210400	
Cattle feed	11200		Livestock	36000	368000
Fertilisers	8800	280000	By Products consumed		
To Purchases:			by proprietor:		
Livestock	46400		Milk	19200	
Fertilisers	9600		Paddy	4800	24000
Seeds	4800		By Closing Stock:		
Cattle feed	27200	88000	Livestock	240000	
To Crop expenses:			Paddy	12000	
Labour	28800		Cattle feed	7200	
Other direct exp.	3200	32000	Fertilisers	4800	264000
To Livestock Exp:					
Medicines	4800				
Labour	28800				
Dairy expenses	6400	40000			
To Gross Profit c/d		216000			

	656000		656000
To General Expenses	48000	By Gross Profit b/d	216000
To Depreciation on tractor @10%	14400		
To Net Profit transferred to Capital	153600		
	216000		216000

Balance Sheet
as on 31st December 2014

Liabilities	Rs.	Assets	Rs.
Creditors	47200	Cash in hand and bank	68000
Capital:		Closing Stock:	
Opening Balance	684800	Livestock	240000
Add: Net Profit	153600	Paddy	12000
	838400	Cattle feed	7200
Less: Drawings	24000	Fertilisers	4800
	814400		264000
		Tractor	144000
		Less: Depreciation	14400
		Land	129600
	861600		400000
			861600

REVIEW QUESTIONS

A. Short Answer Type questions

21. Define farm accounting.
22. What are the reasons for slow growth of farm accounting in India?

B. Short Essay Type Questions

12. Explain the objectives of farm accounting.
13. Write a note on importance of farm accounting.
14. Give the list of expenses and incomes of different farming activities.
15. What are the books of accounts maintained under farm accounting?
16. Briefly explain the characteristics of farm accounting.

C. Essay Type Questions

5. Briefly explain the procedures of recording transactions under farm accounting.
6. What is farm accounting? Explain its characteristics and importance.

D. Practical Problems

1. Prepare a Crop Account from the following information to ascertain the profit made by the farm's crop division.

	Opening Stock (Rs.)	Closing Stock (Rs.)
Wheat	5000	4000
Seeds	1000	700
Fertilisers	1500	800

Purchases:

Seeds	Rs. 600
Fertilisers	Rs. 900
Wages:	
Paid in cash	Rs. 6800
Paid in kind (Wheat)	Rs. 4600
Sale of Wheat	Rs. 35400
Wheat consumed by proprietor	Rs. 1600
Depreciation on farm machinery	Rs. 2000

(Answer: Crop Profit transferred to General P&L A/c – Rs. 24700; Balance Sheet Total – Rs. 137500).

2. From the following trial balance of a farmer, prepare Trading and Profit and Loss Account for the year ended 31st December 2014 and Balance Sheet as on that date.

Debit Balances	Rs.	Credit Balances	Rs.
Opening Stock:		Sales:	
Livestock	30500	Milk	15200
Paddy	2000	Paddy	26300
Cattle feed	1400	Livestock	4500
Fertilisers	1100	Creditors	5900
Purchases:		Capital	85600
Livestock	5800		
Fertilisers	1200		
Seeds	4000		
Crop expenses:			
Labour	3600		
Other direct expenses	400		
Livestock Expenses	5000		
General expenses	6000		
Tractor	18000		
Land	50000		
Cash in hand and at bank	8500		
	137500		137500

Also consider the following adjustments:

a. Closing stock:

Livestock	Rs. 30000
Paddy	Rs. 1500
Cattle feed	Rs. 900
Fertilisers	Rs. 600

b. The proprietor has consumed the following items out of his farm output:

Milk	Rs. 2400
Paddy	Rs. 600

c. Provide 10% depreciation on tractor.

(Answer: Gross Profit – Rs. 27000; Net Profit transferred to Capital A/c – Rs. 19200; Balance Sheet Total – Rs. 107700).

MODULE –5

■ HUMAN RESOURCE ACCOUNTING (HRA)

■ ACCOUNTING FOR PRICE LEVEL CHANGES (INFLATION ACCOUNTING)

LESSON 8

HUMAN RESOURCE ACCOUNTING (HRA)

Meaning and Definition of Human Resource Accounting

Human resource accounting is the process of identifying and reporting investments made in the human resources of an organization that are presently unaccounted for in the conventional accounting practices. It is an extension of standard accounting principles. Measuring the value of human resources can assist organizations in accurately documenting their assets.

The American Accounting Association's (AAA) has defined Human Resource Accounting as "the process of identifying and measuring data about human resources and communicating this information to interested parties".

Eric Flamholtz has defined Human Resource Accounting as "the measurement and reporting of the cost and value of people in organizational resources"

Stephen Knauf defined Human Resource Accounting as "the measurement and quantification of human organizational inputs such as recruiting, training, experience and commitment."

Thus HRA not only involves measurement of all the costs or investments associated with the recruitment, placement, training and development of employees, but also the quantification of the economic value of the people in an organization.

Objectives of Human Resource Accounting

1. To furnish cost value information for making proper and effective management decisions about acquiring, allocating, developing, and maintaining human resources in order to achieve cost effective organizational objectives.
2. To monitor effectively the use of human resources by the management.
3. To have an analysis of the Human Asset, i.e. whether such assets are conserved, depleted, or appreciated.
4. To aid in the development of management principles and proper decision making for the future, by classifying financial consequences of various practices.

Development of Human Resource Accounting (HRA)

Research during the early stages of development of HRA was conducted at the University of Michigan by a research team including the late organizational psychologist Rensis Likert, R.

Lee Brummet, William C. Pyle and Eric Flamholtz. The group worked on a series of research projects designed to develop concepts and methods of accounting for human resources. One outcome of this research was a paper representing one of the earliest studies dealing with human resource measurement and the one in which the term "Human Resource Accounting" was used for the first time. They focused on HRA as a tool for increasing managerial effectiveness in the acquisition, development, allocation, maintenance, and utilization of its human resources. But the traces of a rudimentary HRA can be found in the Medieval European practice of calculating the cost of keeping a prisoner versus the expected future earnings from him.

Need and Importance of Human Resource Accounting

In the recent decades concentration is switching from manufacturing organization to service rendering organization, where human is the main resource. But not only for the service organization but also human resource accounting is also necessary for the manufacturing organization to measure their production personnel's expertise. The necessities of the HRA can be as follows.

1. Measuring the expertise of the employees and management of the organization.
2. Find out the true value of the assets and liabilities hold by the organization. As the expertise of the employees is considered as assets and value to be provided to the employees are considered as liabilities.
3. Applying a strong monitoring process on the human resources of the organization.
4. It provides the management a sound basis for controlling the human resource.
5. Provide a better basis of determining organizational goal and ways of achieving these goals.
6. Provide the investors of the organization, shareholders and debt holders, accurate information for better decision making
7. Find out the true picture of the future prospects of the organization, as the utilization of other resources are fully depending on the human resources.
8. Giving the stakeholders information about, how much value addition is done by the organization to country's human resource as part of the corporate social responsibility.

Methods of Human Resource Accounting

There are different models in the valuation of human resources. They can be discussed under the two heads as follows:

A. Cost Based Models:

1. Historical Cost Model
2. Replacement Cost Model
3. Opportunity Cost Model
4. Standard Cost Model

B. Value Based Models:

1. Present Value of Future Earnings Model or Lev and Schwartz Model
2. Rewards Valuation Model or Flamholtz Model

3. Certainty Equivalent Net Benefit Model
4. Chakraborty Model
5. Dasgupta Model

Historical Cost Model

This approach is also called an acquisition cost model. This approach was developed by Brummet, Flamholtz and Pyle. But the first attempt towards employee valuation was made by a footwear manufacturing company, R. G. Barry Corporation of Columbus, Ohio with the help of Michigan University in 1967.

This method measures the organization's investment in employees using the five parameters: recruiting, acquisition, formal training and familiarization, informal training and informal familiarization, and experience and development. This model suggests that instead of charging the costs to profit and loss statement, it should be capitalized in the balance sheet. The process of giving a status of asset to the expenditure item is called capitalization. In human resource accounting, it is necessary to amortize the capitalized amount over a period of time. The unamortised cost is shown as investments in the human assets. If an employee leaves the firm (i.e. human assets expire) before the expected service life period, then the net value to that extent is charged to the current revenue.

Merits of Historical Cost Model

- i. This model is very simple to understand and easy to work out.
- ii. It meets the traditional accounting concept of matching cost with revenue.
- iii. It provides a basis for evaluating a company's return on its investments in human resources.

Limitations of Historical Cost Model

- i. The valuation method is based on the false assumption that the rupee is stable.
- ii. This method measures only the costs to the organization, but ignores completely any measure of the value of the employee to the organization.
- iii. It takes only the cost of acquisition of employees and thus ignores the aggregate value of their potential services.
- iv. It is too tedious to gather the related information regarding the human values.
- v. It is difficult to determine the number of years over which the capitalised expenditure is to be amortised.

Replacement Cost Model

The historical cost model was highly criticised as it only considers the sunk costs which are irrelevant for decision making. Thus a new model for HRA was conceptualised which took into the account, the costs that would be incurred to replace its existing human resources by an identical one. This model measures the cost of replacing an employee. According to Rensis Likert, replacement cost includes recruitment, selection, compensation, and training cost (including the income foregone during the training period). The data derived from this method could be useful in deciding whether to dismiss or replace the staff.

Merits of Replacement Cost Model

- i. This model is more realistic as it considers the current value of human resources in a company.
- ii. It is more representative and logical.

Limitations of Replacement Cost Model

- i. This method may also lead to an upwardly biased estimate because an inefficient firm may incur a greater cost to replace an employee
- ii. There may be no similar replacement for a similar certain existing asset.

Opportunity Cost Model

This model was advocated by Hekiman and Jones in 1967. This model is also called as Market Value Model. This model of measuring human resources is based on the concept of opportunity cost (i.e. the value of an employee in its alternative best use, as a basis of estimating the value of human resources). The opportunity cost value may be established by competitive bidding within the firm, so that in effect, managers bid for any scarce employee. A human asset therefore will have a value, only if it is a scarce resource.

Limitations of Opportunity Cost Model

- i. This model excludes the employees who are not scarce.
- ii. Under this model, valuation on the basis of opportunity cost is restricted to alternative use within the organisation.

Standard Cost Model

This model was developed by David Watson. This model envisages establishment of a standard cost per grade of employee updated every year. Replacement costs can be used to develop standard costs of recruitment, selection, training and developing individuals. Such standards can be used to compare result with those planned. Variance should be analysed and would form a suitable basis for control. But under this model, determination of standard cost for each grade of employee is a difficult process.

Present Value of Future Earnings Model or Lev and Schwartz Model

In 1971, Lev and Schwartz proposed an economic valuation of employees, based on the present value of future earnings, adjusted for the probability of employees' death, separation or retirement. This method helps in determining what an employee's future contribution is worth today.

According to this model, the value of human capital embodied in a person who is 'r' years old, is the present value of his or her future earnings from employment and can be calculated by using the following formula:

$$V_r = \frac{I(t)}{(1 + R)^{t-r}}$$

Where, V_r = expected value of a 'r' year old person's human capital

t = the person's retirement age

$I(t)$ = expected annual earnings of the person upto the retirement

R = discount rate.

Limitations of Present Value of Future Earnings Model

- i. This model ignores the possibility and probability that an individual may leave an organisation for reasons other than death or retirement.
- ii. This model also ignores the probability that people may make role changes during their careers.

Rewards Valuation Model or Flamholtz Model

This model was developed by Flamholtz. He advocated that an individual's value to an organisation is determined by the services he is expected to render. This model is an improvement to the Present Value of Future Earnings Model. The model is based on the presumption that a person's value to an organisation depends upon the positions to be occupied by him in the organisation. The movement of people from one organisational role to another is a stochastic process with rewards. As people move and occupy different organisational roles, they render services (i.e. rewards) to the organisation. However, the roles they will occupy in future will have to be determined probabilistically for each individual.

This model suggests a five steps approach for assessing the value of an individual to the organisation.

1. Forecasting the period a person will remain in the organisation, i.e. his expected service life.
2. Identifying the service states, i.e. the roles that he might occupy, of course, the time at which he will leave organisation.
3. Estimating the value derived by the organisation when a person occupies a particular position for a specified time period.
4. Estimation of the probability of occupying each possible mutually exclusive state at specified future times.
5. Discounting the value at a predetermined rate to get the present value of human resources.

Limitations of Rewards Valuation Model

1. It is difficult to estimate the probabilities of likely service states of each employee.

2. Determining the monetary equivalent of service states is also very difficult and costly affair.
3. Since the analysis is restricted to individuals, it ignores the value added element of individuals working as groups.

Certainty Equivalent Net Benefit Model

This model was suggested by Pekin Ogan in 1976. Under this model, the value of human resources is determined by taking into consideration the certainty with which the net benefits in future will accrue to the enterprise. The model involves the following steps:

1. Net benefit from each employee.
2. Certainty factor at which the benefits will be available in future.
3. The certainty equivalent benefits will be calculated by multiplying the certainty factor with the net benefits from all employees. This will be the value of human resources of the enterprise.

Chakraborty Model or Aggregate Payment Model

This model was suggested by Prof. S.K. Chakraborty in 1976. He was the first Indian to suggest a model on human resources of an enterprise. Under this model the value of human resources can be calculated by dividing the employees into two groups – Managerial and non-managerial, and then multiplying average tenure of group of employees with their average salary. The value thus obtained is discounted at the expected average after tax return on investment (ROI) over the average tenure period, so that value of human asset does not fluctuate frequently.

Dasgupta Model or Total Cost Model

Prof. N. Dasgupta suggested this model in 1978. According to this model the total cost incurred by the individual upto that position in the organisation should be taken as the value of a person which is further adjusted by his intelligence level. The value thus calculated is revised time to time on the basis of age, performance, experience and other capabilities.

Benefits of Human Resource Accounting

The following are the important benefits of Human Resource Accounting.

1. Helpful in proper implementation of Return on Capital Employed
2. Improves managerial decision making by maintaining detailed records relating to internal human resources.
3. It serves social purpose by identifying human resource as a valuable asset.
4. It helps to increase the productivity of human resources.
5. It is very essential where human element is the prime factor.
6. Helps in investment decisions.

Limitations of Human Resource Accounting

Although there are various advantages to an organisation by HRA it is not free from the limitations. The following are the important limitations of HRA.

1. There are no clear cut and specific procedures or guidelines for finding costs and value of human resources of an organization. The systems that are being adopted have certain drawbacks.
2. The period of existence of human resources is uncertain and hence valuing them under uncertainty in the future seems to be unrealistic.
3. The much needed empirical evidence is yet to be found to support the hypothesis that HRA as a tool of management facilitates better and effective management of human resources.
4. Since human resources are incapable of being owned, retained, and utilized, unlike physical assets, this poses a problem to treat them as assets in the strict sense.
5. There is a constant fear of opposition from the trade unions as placing a value on employees would make them claim rewards and compensations based on such valuations.
6. In spite of all its significance and necessity, Tax Laws don't recognize human beings as assets.
7. There is no universally accepted method of the valuation of human resources.

REVIEW QUESTIONS

A. Short Answer Type questions

23. Define Human Resource Accounting.
24. What are the objectives of HRA?

B. Short Essay Type Questions

17. Briefly explain the benefits of HRA.
18. What are the limitations of HRA?
19. Write a note on development of Human Resource Accounting.
20. Explain the need and importance of Human Resource Accounting.

C. Essay Type Questions

1. Write short notes on the following:
 - a) Historical Cost Model
 - b) Replacement Cost Model
 - c) Opportunity Cost Model
 - d) Standard Cost Model
2. Discuss the various methods of HRA with merits and demerits.
3. Explain the Lev and Schwartz Model and Flamholtz Model of Human Resource Accounting.

LESSON 9

ACCOUNTING FOR PRICE LEVEL CHANGES (INFLATION ACCOUNTING)

Introduction

Conventional or historical cost accounting assumes that money has stable value. But in reality, value of money varies from time to time as a result of changes in the general level of prices. Prices of goods and services change over the time. The change in price as a result of various economic and social forces brings about a change in the purchasing power of money. The historical cost accounting system does not consider the impact of price level change on financial statements. Therefore, Accounting for Price Level Changes has been emerged as a new accounting system. Accounting for price level changes is also called as Inflation Accounting as changes in prices are usually on upward side.

Limitations of Historical Accounting

Historical cost accounts suffer from the following limitations:

1. Utility of accounting records seriously impaired

Financial statements prepared under historical cost accounting fail to reflect the effect of such changes in purchasing power on the financial position and profitability of the firm.

2. Unrealistic profits

Under historical cost accounting system, depreciation calculated on the basis of historical cost of old assets is usually lower than that of those calculated at current value or replacement value. This results in unrealistic and more profits.

3. Insufficient provision of depreciation

Under historical cost accounting system, depreciation is calculated on the original cost of fixed assets with the result that only an amount equivalent to the original cost of the fixed assets is available for its replacement when its life is over.

4. Values of fixed assets are unrealistic

In times of rising prices, historical cost accounting system does not give a true and fair view the business enterprise as is required under the Companies Act as fixed assets are shown at their historical cost and not at current values.

5. Different basis

Under historical cost accounting system, fixed assets are shown at the historical cost whereas operating expenses and incomes are taken at current prices. These different bases will affect the reliability of accounting information.

6. Violation of Matching Principle

Historical cost accounting shows closing stock at cost price or market price whichever is less. Sales are shown at current purchasing power of the rupee while stocks are shown at cost or market price, whichever is less. Thus profit disclosed under historical cost accounting does not represent increase in wealth of the business in terms of current purchasing power because closing stocks are not shown at their current value.

7. Difficulty in comparison of profitability of two plants

In case of price level changes, comparison of profitability of two plants set up at different dates becomes difficult.

8. Misleading inter-period and inter-firm comparison

Accounting ratios are used for inter-period and inter-firm comparison. The accounting ratios calculated based on historical costs will not give correct view.

Meaning and Definition of Accounting for Changing Prices

Accounting for price level changes is a system of accounting which regularly records all items in financial statements at their current values.

According to American Institute of Certified Public Accountants, "Inflation accounting is a system of accounting which purports to record, as a built in mechanism, all economic events in terms of current cost".

Advantages of Accounting for Price Level Changes

1. Financial statements show real profit of the firm.
2. Sufficient funds are available for replacement of fixed assets as depreciation is charged on current cost of fixed assets.
3. Balance sheet shows a true and fair view of the financial position of a firm because assets are shown at their current values.
4. It is helpful for managerial decisions as the anticipated and actual profits are expressed in rupees of the same purchasing power.
5. It helps in making better comparison of the profitability of the two plants set up at different dates because current values are taken for comparison purposes.
6. Financial ratios calculated under inflation accounting would provide more meaningful information.
7. A rate of return on capital employed adjusted to the current price index is more useful in the valuation of business by its owners, creditors and management.

Disadvantages of Accounting for Price Level Changes

1. Charging depreciation on current values of fixed assets is not acceptable to income tax authorities.
2. Too many calculations are involved for adjusting accounting to changing prices and making financial statements complicated.
3. Charging depreciation is a process of depreciation of original cost of fixed asset over its effective life, so charging anything in excess over the effective life of an asset is against the concept of depreciation.
4. Adjusting accounts to changing prices is a never ending process because prices go on changing every day.
5. Inflation accounting is not free from prejudice.
6. Distribution of dividend on the basis of profit shown under this system is not desirable.
7. Lower depreciation will be charged in times of deflation. It will increase profit which will lead to payment of excessive dividend.

Methods of Accounting for Price Level Changes

There are four different approaches to price level accounting. They are as follows:

1. Current Purchasing Power Accounting (CPPA).
2. Current Cost Accounting (CCA).
3. Specific and General Price Level Accounting (SGPLA).
4. Periodic Revaluation of fixed assets along with the adoption of LIFO method of inventory.

Current Purchasing Power Accounting (CPPA)

This approach is also known as General Price Level Accounting. Under this approach, the historic cost accounting data are adjusted on the basis of any established and approved general price index at a given date. In India, Wholesale Price Index (WPI) of the Reserve Bank of India (RBI) can be taken which shows the change in the value of the rupee in the past years. This approach takes into account the changes in the value of items as a result of the general price level, but it does not account for changes in the value of individual items. The formula for the conversion of historic cost to the general price level is as under:

$$\text{Conversion Factor} = \frac{\text{Index converting to}}{\text{Index converting from}}$$

The effect of the loss or profit on monetary assets or owing liabilities is also ascertained. Monetary items are those whose amounts are fixed by contract or otherwise, regardless of changes in the general price level. Monetary items can be debtors, creditors, bank balance, cash, redeemable preference share capital and loans. The value of these items is fixed as we are not going to get more from debtors or pay more to the creditors regardless of general increase in the price level. Non-monetary items include inventory, machinery, building, furniture etc.

Holders of monetary assets lose if there is increase in the general price index because purchasing power of assets owned, is actually decreased. Debtors are not going to pay more because of increase in the price level. Similarly, balance of cash in hand is not going to increase because of inflation.

Thus, the amounts of monetary assets are fixed by contract or otherwise in terms of rupees, regardless of changes in general price level. On the other hand, decrease in the general price level is a gain because it increases the purchasing power of monetary assets owned.

Under this approach, firms prepare financial statements on historical cost basis in usual manner and also prepare supplementary statement showing the historical cost items in terms of current value on the basis of index.

Illustration 1: A firm had Rs.200000 as cash at bank on 1st April 2014. The consumer price index on that date was 200. During the year ended 31st March 2014 the receipts and payments were as stated below:

Date	Receipts	Amount	Index	Date	Payments	Amount	Index
		105000	210	Sep 15	Cost	215000	215
Jun 1	Sales	345000	230	Nov 20	Cost	150000	240
Jan 15	Sales			Dec 1	Cost	200000	225

Ascertain the profit or loss on account of price changes. The year end index was 240.

Solution:

	Historical	Adjusted Factor	Price level Adjusted Amount
Opening Balance	200000	240/200	240000
Receipts:			
Jun 1	105000	240/210	120000
Jan 15	345000	240/230	360000
Total (A)	650000		720000
Payments:			
Sep 15	215000	240/215	240000
Nov 20	150000	240/240	150000
Dec 1	200000	240/225	213333
Total (B)	565000		603333
Balance (A-B)	85000		116667

As the price level adjusted amount is Rs. 116667 and actual balance Rs. 85000, there is a purchasing power loss of Rs. 31667.

Illustration 2: A company had the following monetary items on January 1:

		Rs.
Debtors		41000
Bills Receivables		10000
Cash		20000
		71000
Less: Bills Payables	10000	
Creditors	25000	35000
Net Monetary Assets		36000

The transactions affecting monetary items during the year were:

- Sales of Rs. 140000 made evenly throughout the year.
- Purchases of goods of Rs. 105000 made evenly during the year.
- Operating expenses of Rs.35000 were incurred evenly throughout the year.
- One machine was sold for Rs.18000 on July 1.
- One machine was purchased for Rs.25000 on December 31.

The general price index was as follows:

On January 1	300
Average for the year	350
On July 1	360
On December 31	400

Compute the general purchasing power gain or loss for the year stated in terms of the current year-end rupee.

Solution:

Statement of General Purchasing Power Gain or Loss

	Historical Amount	Adjusted Factor	Price Level Adjusted Amount	Purchasing Power Gain or Loss
Monetary Assets on Jan 1:				
Debtors	41000	400/300	54667	
Bills Receivables	10000	400/300	13333	
Cash	20000	400/300	26666	
Increase in Monetary Assets:				
Sales	140000	400/350	160000	
Sale of Machinery	18000	400/360	20000	
Total (A)	229000		274666	
Decrease in Monetary Assets:				
Purchases	105000	400/350	120000	
Operating Expenses	35000	400/400	40000	
Purchase of Machinery	25000		25000	
Total (B)	165000		185000	
Monetary Assets on Dec 31(A-B)	64000	400/300	89666	
Purchasing Power Loss		400/300		(-) 25666
Monetary Liabilities on Jan 1:				
Bills Payables	10000		13333	
Creditors	25000		33333	
Monetary Liabilities on Dec 31	35000		46666	
Purchasing Power Gain				11666
Net Monetary Assets on Dec 31	29000		43000	
Net Purchasing Power Loss or Loss on Monetary Items				(-) 14000

Illustration 3: From the information given below, ascertain the cost of sales and closing inventory under Current Purchasing Power Accounting Method if the organisation follows (i) FIFO method, and (ii) LIFO method.

	Historical Cost	General Price Index
Inventory on 31 st March 2014	40000	200
Purchases during 2014-15 (Average)	310000	220
Inventory on 31 st March 2015	50000	230

Solution:

Cost of Sales:

Opening Inventory	40000
Add: Purchases	310000
	350000
Less: Closing Inventory	50000
Cost of Sales	300000

	Historical Amount	Adjusted Factor	Price Level Adjusted Amount
I. Under FIFO Method:			
a. Cost of Sales:			
Out of opening inventory	40000	230/200	46000
Out of purchases	260000	230/220	271818
	300000		317818
b. Closing Inventory:			
Out of purchases	50000	230/220	52273
II. Under LIFO Method:			
a. Cost of Sales:			
Out of purchases	300000	230/220	313636
b. Closing Inventory:			
Out of opening inventory	40000	230/200	46000
Out of purchases	10000	230/220	10454
	50000		56454

Illustration 4: The Balance Sheet of Arun & Co. as on 1st January 2014 and Profit and Loss Statement for the year ending 31st December 2014 are given below:

Balance Sheet
as on 1st January 2014

Liabilities	Rs.	Assets	Rs.
Capital	500000	Plant and Machinery	375000
13% Loan	125000	Furniture	50000
Current Liabilities	62500	Inventory	75000
		Debtors	62500
		Cash	125000
	687500		687500

Profit and Loss Statement
for the year ending 31st December 2014

Sales		Rs. 1250000
Less: Cost of goods sold:		
Opening inventory	75000	
Add: Purchases	887500	
	962500	
Less: Closing inventory	87500	875000
Gross Profit		375000
Less: Operating expenses	188750	

Interest on loan	16250	
Depreciation on machinery	56250	
Depreciation on furniture	5000	266250
Net Profit		108750

Debtors and current liabilities balances remained constant throughout the year. Interest on loan was paid on 31st December 2014. The general price index was as follows:

On 1 st January 2014	300
Average for the year	320
On 31 st December 2014	360

Prepare the financial statements for the year 2014 after adjusting for price level changes under Current Purchasing Power Method.

Solution:

Statement of General Purchasing Power Gain or Loss

	Historical Amount	Adjusted Factor	Price Level Adjusted Amount	Purchasing Power Gain or Loss
Monetary Assets on 1 st January 2014:				
Debtors	62500	360/300	75000	
Cash	125000	360/300	150000	
Increase in Monetary Assets:				
Sales	1250000	360/320	1406250	
Total (A)	1437500		1631250	
Decrease in Monetary Assets:				
Purchases	887500	360/320	998438	
Operating Expenses	188750	360/320	212344	
Interest on Loan	16250	360/360	16250	
Total (B)	1092500		1227032	
Monetary Assets on 31 st December 2014.(A-B)	345000		404218	
Purchasing Power Loss				(-) 59218
Monetary Liabilities on 1 st January 2014:				
Loan	125000	360/300	150000	
Current Liabilities	62500	360/300	75000	
Monetary Liabilities on 31 st December 2014	187500		225000	
Purchasing Power Gain				37500
Net Monetary Assets on 31 st December 2014	157500		179218	
Net Purchasing Power Loss or Loss on Monetary Items				(-) 21718

Profit and Loss Statement as per CPPA Method
for the year ending 31st December 2014

Particulars	Historical Amount	Adjusted Factor	Price Level Adjusted Amount
Sales	1250000	360/320	1406250
Opening Inventory	75000	360/300	90000
Purchases	887500	360/320	998438
	962500		1088438
Less: Closing Inventory	87500	360/320	98438
Cost of Goods Sold	875000		990000
Gross Profit (Sales-CGS)	375000		416250
Operating Expenses	188750	360/320	212344
Depreciation on Machinery	56250	360/300	67500
Depreciation on Furniture	5000	360/300	6000
Interest on Loan	16250	360/360	16250
Total Expenses	266250		302094
Net Profit (G/P-Expenses)	108750		114156
Less: Loss on Monetary Items			21718
Retained Earnings			92438

Balance Sheet
as on 31st December 2014

Liabilities	Rs.	Assets		Rs.
Capital (500000x360/300)	600000	Plant and Machinery (375000x360/300)	450000	
Retained Earnings	92438	Less: Depreciation	67500	382500
13% Loan	125000	Furniture (50000x360/300)	60000	
Current Liabilities	62500	Less: Depreciation	6000	54000
		Inventory (87500x360/320)		98438
		Debtors		62500
		Cash		282500
	879938			879938

Note: FIFO Method has been followed for the cost of goods sold and closing inventory in the absence information.

Calculation of Cash Balance in Balance Sheet:

Opening Cash Balance	
Add: Sales	1250000
	1250000

		1375000
Less: Purchases	887500	
Operating Expenses	188750	
Interest on Loan	16250	1092500
Closing Cash Balance		282500

Illustration 5: Adjust the following Statement of Profit and Loss and Balance Sheet under CPPA method to ascertain the changes in net profit and reserve.

Statement of Profit and Loss for the year ending 31 st December 2014		(Rs. in 000's)
Sales		600
Less: Cost of goods sold:		
Opening inventory	96	
Add: Purchases	504	
	600	
Less: Closing inventory	84	516
Gross Profit		84
Less: Administration expenses	30	
Depreciation on buildings	6	36
Net Profit		48

Balance Sheet as on 31 st December 2014		(Rs. in 000's)
Share Capital		240
Reserve		240
		480
Land		168
Buildings	240	
Less: Depreciation	54	186
	84	
Stock	48	
Debtors	36	
Cash	168	126
Less: Creditors	42	
		480

Following further information are also given:

1. Closing stock was acquired during last quarter of 2014 and opening stock during the last quarter of 2013.
2. The land and buildings were acquired and the capital issued during 1998. The buildings are depreciated straight line over 40 years.
3. Sales, purchases and administration expenses are assumed to occur evenly over the year and hence at average prices.
4. The relevant retail price indices are:

a.	2006 average	60
b.	2013 last quarter average	108
c.	2014 last quarter average	116
d.	2014 average	114
e.	2013 December 31	110
f.	2014 December 31	118

Solution:

Adjusted Statement of Profit and Loss as per CPPA Method
for the year ending 31st December 2014 (Rs. in 000's)

Particulars	Historical Amount	Adjusted Factor	Price Level Adjusted Amount
Sales	600	118/114	621.05
Opening Stock	96	118/108	104.88
Purchases	504	118/114	521.68
	600		626.56
Less: Closing Stock	84	118/116	85.45
Cost of Goods Sold	516		541.11
Gross Profit (Sales-CGS)	84		79.94
Administration expenses	30	118/114	31.05
Depreciation on Buildings	6	118/60	11.80
Total Expenses	36		42.85
Net Profit (G/P-Expenses)	48		37.09

Balance Sheet
as on 31st December 2014

(Rs. in 000's)

	Historical Amount	Adjusted Factor	Price Level Adjusted Amount
<i>Equity and Liabilities:</i>			
Share Capital	240	118/60	472.00
Reserves (Bal. Fig)	240		351.65
Creditors	42		42.00
	522		865.65
<i>Assets:</i>			
Land	168	118/60	330.40
Buildings less accumulated depreciation (9 years) (240-54)	186	118/60	365.80
Stock	84	118/116	85.45
Debtors	48		48.00
Cash	36		36.00
	522		865.65

Current Cost Accounting (CCA)

Under CPPA method, the changes in the value money are considered. Under CCA method historic values of items are not taken into account; rather current values of individual items are taken as basis for preparation of final statements. Here, the assets are valued at current cost. Current cost is the cost at which the assets can be replaced as on a date. This cost is referred as replacement cost.

Characteristics of CCA

1. Fixed assets are shown in Balance Sheet at their current values and not at their depreciated original costs.
2. Stocks are shown in Balance Sheet at their value to business, the value prevailing on the date of balance sheet.
3. Depreciation is calculated on current values of the relevant fixed assets to find out profit for the year.
4. The difference between the current values and the depreciated original costs of fixed assets is transferred to Revaluation Reserve Account which is shown on the liabilities side of Balance Sheet and which is not available for dividend distribution.
5. Cost of stock consumed during the year is taken at current value of the stock at the date of consumption and not at purchase price of the stock consumed.
6. Monetary assets and liabilities are not adjusted because they are always recorded at their value to the business. The values of these items do not change with changes in price level.
7. Accounting profit under CCA is divided into three parts as follows:
 - a. Current Operating Profit = Sales proceeds of goods and services sold – Replacement cost of goods or services sold.
 - b. Realised Holding Gain = Replacement cost of non-monetary asset sold on date of sale – Historical Cost.
 - c. Unrealised Holding Gain = Replacement cost of non-monetary asset on closing date – Historical Cost.

Adjustments for calculation of Current Operating Profit

The following adjustments are to be made in calculation of the Current Operating Profit under CCA method:

1. Current Cost Adjustments
 - a. Depreciation Adjustment
 - b. Cost of Sales Adjustment (COSA)
 - c. Monetary Working Capital Adjustment (MWCA)
2. Gearing Adjustment

Depreciation Adjustment

Under this method, depreciation is debited to profit and loss account on the basis Current Value or Replacement Cost of the fixed assets. The current depreciation charge is obtained under this method by apportioning average net replacement cost over expected remaining useful life of fixed asset at the beginning of the period.

Backlog Depreciation- If fixed assets are revalued every year, there will be short fall of depreciation. Such depreciation is called backlog depreciation. The backlog depreciation is debited to the Current Cost Reserve or adjusted against the Revaluation Reserve on the fixed assets. The backlog depreciation can be calculated as follows:

$$\text{Backlog Depreciation} = \text{Gross Replacement Cost} - \text{Net Replacement Cost} - (\text{Previous Accumulated Depreciation} + \text{Depreciation for the Current Year})$$

Illustration 6: A firm is using machinery with historical gross value of Rs. 60000 and the accumulated depreciation of Rs. 24000 including Rs. 6000 depreciation for the current year. The gross replacement cost of the machine is Rs. 120000 and it is estimated that its remaining useful life will not change. Calculate the backlog depreciation.

Solution:

	Historical Cost Accounting(Rs.)	Current Cost Accounting(Rs.)
Value of machinery	60000	120000
Current depreciation	6000	12000
Previous accumulated depreciation	18000	36000
Total accumulated depreciation	24000	48000
Value as per balance sheet	36000	72000

Backlog Depreciation

$$= \text{Gross Replacement Cost} - \text{Net Replacement Cost} - (\text{Previous Accumulated Depreciation} + \text{Depreciation for the Current Year})$$

$$= 120000 - 72000 - (18000 + 12000)$$

$$= \text{Rs. } 18000$$

Illustration 7: Calculate the amount of depreciation under CCA method for each of the four years as well as the backlog depreciation for a machine from the following information by assuming straight line method of depreciation:

Cost of Machine	Rs. 60000
Estimated life	4 years
Residual value	Nil
Inflation factor	10% per annum

Solution:

Calculation of Depreciation under CCA method

Year	Historical Cost	Replacement Cost	Depreciation @ 25% on		Additional Depreciation (CCA Adjustment)
			Historical Cost	Replacement Cost	
1.	60000	66000 (60000x110/100)	15000	16500	1500
2.	60000	72600 (66000x110/100)	15000	18150	3150
3.	60000	79860 (72600x110/100)	15000	19965	4965
4.	60000	87846 (79860x110/100)	15000	21962	6962
			60000	76577	16577

Calculation of Backlog Depreciation

End of Year	HC	RC	Total Depreciation		Total Additional Depreciation (RC-HC)	Additional Annual Depreciation	CCA Depreciation Adjustment	Backlog Depreciation on
			HC	RC				
1.	60000	66000	15000	16500	1500	1500	1500	Nil
2.	60000	72600	30000	36300 (2 yrs)	6300	4800 (6300-1500)	3150	1650
3.	60000	79860	45000	59895 (3 yrs)	14895	8595 (14895-6300)	4965	3630
4.	60000	87846	60000	87848 (4 yrs)	27848	12953 (27848-14895)	6962	5991
						27848	16577	11271

Cost of Sales Adjustment (COSA)

Cost of Sales Adjustment refers to the difference between value to the business and the historical cost of stock consumed in the period. COSA can be calculated as follows

$$COSA = (C - O) - I_a \left(\frac{C}{I_c} - \frac{O}{I_o} \right)$$

C = Historical cost of Closing Stock

O = Historical cost of Opening Stock

I_a = Average Index No. for the period

I_c = Index No. appropriate to closing stock

I_o = Index No. appropriate to Opening stock

Illustration 8: Calculate the Cost of Sales Adjustment from the following information:

Opening stock on 1 st January 2014	Rs. 30000
Closing stock on 31 st December 2014	Rs. 40000
Index on 1 st January 2014	116
Index on 31 st December 2014	125
Average Index for the year 2014	118

Solution:

$$\begin{aligned}
 \text{COSA} &= (C - O) - I_a \left(\frac{C}{I_c} - \frac{O}{I_o} \right) \\
 &= (40000 - 30000) - 118 \left(\frac{40000}{125} - \frac{30000}{116} \right) \\
 &= \underline{\underline{\text{Rs. 2802}}}
 \end{aligned}$$

Monetary Working Capital Adjustment (MWCA)

Monetary Working Capital Adjustment (MWCA) is the difference between trade debtors and creditors. MWCA shows the effect of changes in prices arising from volume. MWCA can be calculated as follows:

$$\text{MWCA} = (C - O) - I_a \left(\frac{C}{I_c} - \frac{O}{I_o} \right)$$

C = Closing Monetary Working Capital

O = Opening Monetary Working Capital

I_a = Average Index No. for the period

I_c = Index No. appropriate to closing Monetary Working Capital

O = Index No. appropriate to opening Monetary Working Capital

Illustration 9: The balance sheet of Malabar & Co. disclosed the following information:

	1 st January 2014	31 st December 2014
Trade Debtors	Rs. 100000	Rs. 130000
Trade Creditors	Rs. 75000	Rs. 80000
Advance to Suppliers	Rs. 30000	Rs. 40000
Index No.	100	120

Average Index

110

Calculate the Monetary Working Capital Adjustment.

Solution:

	Opening MWC (Rs.)	Closing MWC (Rs.)
Trade Debtors	100000	130000
Advance to Suppliers	30000	40000
	130000	170000
Less: Trade Creditors	75000	80000
Net Monetary Working Capital	55000	90000

$$\begin{aligned}
 \text{MWCA} &= (C - O) - I_a \left(\frac{C}{I_c} - \frac{O}{I_o} \right) \\
 &= (90000 - 55000) - 110 \left(\frac{90000}{120} - \frac{55000}{100} \right) \\
 &= \text{Rs. } 13000
 \end{aligned}$$

Gearing Adjustment

Gearing is the ratio of borrowed capital and shareholders' funds. Fixed assets and working capital are partly financed by borrowed capital and partly by shareholders' funds. During inflationary period the replacement cost of assets exceeds the borrowings that has financed by them. In the period of rising prices the shareholders get more benefits because any increase in price will provide more benefit to shareholders. The position would be reverse during deflation. Total of current cost adjustments is abated by gearing adjustment.

After gearing adjustment current cost operating profit will be abated & this abated profit will be attributable to shareholders which will reflect result of adjustment to historical cost trading profit. Gearing adjustment and gearing adjustment ratio can be calculated as follows:

$$\text{Gearing Adjustment} = \frac{L}{L+S} \times A$$

$$\text{Gearing Adjustment Ratio} = \frac{L}{L+S} \times 100$$

L = Average Net Borrowing

S = Average Shareholders' Funds

A = Total of Current Cost Adjustments

It may be noted that in the calculation of net borrowing, cash or any monetary asset which is not considered in the calculation of monetary working capital adjustment must be deducted from the total borrowings.

Illustration 10: Calculate the gearing adjustment from the following data under CCA method:

	Opening (Rs.)	Closing (Rs.)
Convertible Debentures	2000	2400
Bank Overdraft	1200	1600
Cash	200	600

Share Capital	3000	4000
Reserves	1000	1600

Cost of Sales Adjustment Rs. 400

Monetary Working Capital Adjustment Rs. 300

Depreciation Adjustment Rs. 100

Total Current Cost Adjustments Rs. 800

Solution:

Calculation of Net Borrowings

	Opening (Rs.)	Closing (Rs.)
Convertible Debentures	2000	2400
Bank Overdraft	1200	1600
Total Borrowings	3200	4000
Less: Cash	200	600
Net Borrowings	3000	3400

Calculation of Shareholders' Funds

	Opening (Rs.)	Closing (Rs.)
Share Capital	3000	4000
Reserves	1000	1600
Shareholders' Funds	4000	5600

$$\text{Average Net Borrowings (L)} = \frac{3000+3400}{2} = 3200$$

$$\text{Average Shareholders' Funds (S)} = \frac{4000+5600}{2} = 4800$$

$$\text{Current Cost Adjustments (A)} = 800$$

$$\text{Gearing Adjustment} = \frac{L}{L+S} \times A$$

$$= \frac{3200}{3200+4800} \times 800 = \underline{\text{Rs. 320}}$$

Illustration 11: Roy Ltd. gives the following information:

(Rs. in 000's)

	01/01/2014	31/12/2014
a. Net long term borrowings	14000	14000
Hire purchase creditors	4000	2800
Bank overdraft	5000	5600
Taxation	1500	1400
Cash	(5000)	(8400)
Net Borrowings	19500	15400

b. Share capital and reserves	37080	47056
Proposed dividend	500	600
Total Shareholders' funds	37580	47656

Current Cost Adjustments:

Depreciation Adjustment Rs. 3500

Cost of Sales Adjustment Rs. 1620

Monetary Working Capital Adjustment Rs. 1120

Rs. 6240

Calculate Gearing Adjustment Ratio and Current Cost Adjustments after abating Gearing Adjustment.

Solution:

$$\text{Average Net Borrowings (L)} = \frac{19500 + 15400}{2} = 17450$$

$$\text{Average Shareholders' Funds (S)} = \frac{37580 + 47656}{2} = 42618$$

$$\begin{aligned} \text{Gearing Adjustment Ratio} &= \frac{L}{L+S} \times 100 \\ &= \frac{17450}{17450 + 42618} \times 100 = 29.05\% \end{aligned}$$

Current Cost Adjustments after abating Gearing Adjustment:

Current Cost Adjustments (given) Rs. 6240

Less: Gearing Adjustment (6240 x 29.05%) Rs. 1813

CC Adjustments after abating Gearing Adjustment Rs. 4427

Illustration 12: The following were the liabilities and assets of Super Ltd. as on 31st December 2013 and 31st December 2014:

Liabilities	31/12/13 (Rs.000's)	31/12/14 (Rs.000's)	Assets	31/12/13 (Rs.000's)	31/12/14 (Rs.000's)
Equity Shares	3000	3000	Land & Buildings		
Reserves	1200	1400	(Cost – Rs. 3200)	3040	2960
10% Debentures	.....	400	Equipment		
Creditors	200	300	(Cost – 2000)	1000	800
Proposed Dividend	300	300	Stock	600	800
			Debtors	260	560
			Bank	(200)	280

	4700	5400		4700	5400
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Statement of Profit and Loss for the year ended 31st December 2014 was as follows:

(Rs. in 000's)

Sales		2000
Opening Stock	600	
Purchases	1220	
	1820	
Less: Closing Stock	800	1020
Gross Profit		980
Less: Expenses (Including interest on debenture)	200	
Depreciation on building	80	
Depreciation on equipment	200	480
Net Profit		500
Less: Proposed Dividend		300
Balance carried forward		200

The relevant price indices are as follows:

a. 2012 (Average) – Date of building acquisition	105
b. 2009 (Average) – Date of equipment acquisition and issue of equity shares	80
c. 2014 (1 st January) - Debentures issued	116
d. 2014 (Average)	118
e. 2014 (31 st December)	125

Closing stock of 2014 was acquired during whole of 2014 and opening stock during 2013. Show the current cost adjustments under CCA method for the year ended 31st December 2014, under the following heads:

- Cost of Sales
- Depreciation Adjustment
- Monetary Working Capital Adjustment
- Gearing Adjustment.

Solution:

a. Calculation of Cost of Sales (COSA):

$$\begin{aligned}
 COSA &= (C - O) - I_a \left(\frac{C}{I_c} - \frac{O}{I_o} \right) \\
 &= (800 - 600) - 118 \left(\frac{800}{125} - \frac{600}{116} \right) \\
 &= \underline{\underline{Rs. 54.86}}
 \end{aligned}$$

b. Calculation of Depreciation Adjustment:

Depreciation under CCA:

Building (80x125/105)		95.24
Equipment (200x125/80)		312.50
		407.74
Less: Depreciation under Historical Costing:		
Building	80.00	
Equipment	200.00	280.00
Depreciation Adjustment		127.74

c. Calculation of Monetary Working Capital Adjustment (MWCA):

	Opening Balance (31/12/13)	Closing Balance (31/12/14)
Debtors	260	560
Less: Creditors	200	300
Monetary Working Capital	60	260

$$\begin{aligned}
 \text{MWCA} &= (C - O) - I_a \left(\frac{C}{I_C} - \frac{O}{I_O} \right) \\
 &= (260 - 60) - 118 \left(\frac{260}{125} - \frac{60}{116} \right) \\
 &= \underline{\text{Rs. 15.92}}
 \end{aligned}$$

d. Calculation of Gearing Adjustment:

Net Borrowings:

	Opening Balance (31/12/13)	Closing Balance (31/12/14)
Debentures	0	400
Bank Overdraft	200	-----
	200	400
Less: Bank	-----	280
Net Borrowings	200	120

Shareholders' Funds:

	Opening Balance (31/12/13)	Closing Balance (31/12/14)
Equity Shares	3000	3000
Reserves	1200	1400
Proposed Dividend	300	300
Shareholders' Funds	4500	4700

$$\text{Average Net Borrowings (L)} = \frac{200 + 120}{2} = 160$$

$$\text{Average Shareholders' Funds (S)} = \frac{4500+4700}{2} = 4600$$

$$\begin{aligned} \text{Gearing Adjustment Ratio} &= \frac{L}{L+S} \times 100 \\ &= \frac{160}{160+4600} \times 100 = \underline{3.36\%} \end{aligned}$$

Current Cost Adjustments:

Cost of Sales Adjustment	54.86
Depreciation Adjustment	127.74
Monetary Working Capital Adjustment	<u>15.92</u>
Total Current Cost Adjustments	<u>198.52</u>

Gearing Adjustment = Total Current Cost Adjustments x Gearing Adjustment Ratio

$$\text{Gearing Adjustment} = 198.52 \times 3.36\%$$

$$= \underline{6.67}$$

Illustration 13: Following are the Balance Sheets and Profit and Loss Account of a firm, prepared on the basis of historical cost accounting.

Balance Sheet
as on 1st April 2014

	Rs.		Rs.
Capital	480000	Plant and Machinery	240000
Profit and Loss Account	60000	Furniture	60000
Sundry Liabilities	180000	Stock	120000
		Debtors	96000
		Cash	204000
	<u>720000</u>		<u>720000</u>

Balance Sheet
as on 31st March 2015

	Rs.		Rs.
Capital	480000	Plant and Machinery	240000
Profit and Loss Account	174000	Less: Depreciation	<u>24000</u>
Sundry Liabilities	78000	Furniture	60000
		Less: Depreciation	<u>6000</u>
		Stock	96000
		Debtors	144000
		Cash	222000
	<u>732000</u>		<u>732000</u>

Profit and Loss Account
for the year ended 31st March 2015

	Rs.		Rs.
To Stock (on 01/04/2014)	120000	By Sales	1200000
To Purchases	912000	By Stock (on 31/03/2015)	96000
To Depreciation	30000		
To Other Operating Expenses	120000		
To Net Profit	114000		
	1296000		1296000

Additional Information:

- The replacement cost of the goods sold on the date of sales amounted to Rs. 960000.
- The current replacement cost of the stock on 31st March 2015 is Rs. 102000.
- On 31st March 2015, the replacement costs of the plant and machinery and furniture were Rs. 264000 and Rs. 48000 respectively.

Prepare Profit and Loss Statement for the year ended 31st March 2015 and Balance Sheet as on 31st March 2015 on the basis of Current Cost Accounting.

Solution:

Profit and Loss Statement
For the year ended 31st March 2015

	Rs.	Rs.
Sales		1200000
Less: Cost of Goods Sold at Replacement Cost		960000
Gross Profit		240000
Less: Depreciation on Replacement Cost basis:		
Plant and Machinery (264000x10%)	26400	
Furniture (48000x10%)	4800	
Other Operating Expenses	120000	151200
Operating Profit		88800
Add: Realised Holding Gain		24000
Realised Profit		112800
Add: Unrealised Holding Gain		18000
Net Profit		130800

Balance Sheet
as on 31st March 2015

Liabilities	Rs.	Assets	Rs.
Capital	480000	Plant and Machinery	264000
Profit and Loss Account:		Less: Depreciation	26400
Balance on 01/04/2014	60000	Furniture	48000
Realised Profit	112800	Less: Depreciation	4800
Revaluation Reserve		Stock	102000
(Unrealised holding gain)	18000	Debtors	144000
Sundry Liabilities	78000	Cash	222000
	748800		748800

Working Notes:**a. Calculation of Realised Holding Gain:**

	Rs.	Rs.
Replacement Cost of Goods Sold		960000
Less: Historical Cost of Goods Sold		
Opening Stock	120000	
Add: Purchases	912000	
	1032000	
Less: Closing Stock	96000	936000
Realised Holding Gain		24000

b. Calculation of Unrealised Holding Gain (Revaluation Reserve):

	Rs.	Rs.
Replacement Cost on 31 st March 2015:		
Plant and Machinery	264000	
Furniture	48000	
Stock	102000	414000
Less: Historical Cost:		
Plant and Machinery (on 1 st April 2014)	240000	
Furniture (on 1 st April 2014)	60000	
Stock (on 31 st March 2015)	96000	396000
Unrealised Holding Gain		18000

Advantages of Current Cost Accounting

1. Financial statements prepared under this method are more meaningful.
2. The statements reveal true operational efficiency and profit.
3. It prevents overstatement of profit.
4. It helps to determine the correct replacement cost of assets as depreciation is provided at current cost.

Limitations of Current Cost Accounting

1. Due to technological changes it is difficult to determine the value of real assets of the business.
2. There is an element of subjectivity in periodic valuation due to the non-availability of reliable indices.
3. The operating profits of the firm do not reflect the real earnings of the firm.
4. The income tax authorities have not recognised this method

Specific and General Price Level Accounting (SGPLA)

This approach is the combination of the two approaches – Current Purchasing Power Accounting and Current Cost Accounting. This method is also referred as hybrid method. This approach takes into account both the changes in specific prices of individual items and the influences of general price level changes. Under this approach, values shown in the financial

statements are based on current costs and are measured in units of purchasing power. This method is not so popular.

Periodic Revaluation of Fixed Assets along with the Adoption of LIFO Method of Inventory

The advocates of this method are of the view that periodic revaluation of fixed assets along with the adoption of LIFO method (for getting the cost of goods sold and value of closing stock) can considerably reduce the effect of increasing prices. The purpose of periodic revaluation of fixed assets is to charge depreciation on current cost of replacement and the aim of following LIFO method is to charge current cost of goods consumed to Profit and Loss Account.

REVIEW QUESTIONS

A. Short Answer Type questions

25. Define Inflation Accounting.
26. List the methods of Inflation Accounting.
27. What do you mean by CPP Accounting?
28. What do you understand by Current Cost Accounting?
29. What do you mean by SGPLA?

B. Short Essay Type Questions

21. Briefly explain the benefits of Inflation Accounting.
22. What are the limitations of Historical Accounting?
23. Write a note on CPP Accounting.
24. Explain the Current Cost Accounting with its merits and demerits.
25. What are the characteristics of CCA method?

C. Essay Type Questions

1. Define Inflation Accounting. Briefly explain its merits and demerits.
2. Write an essay on Methods of Accounting for Price Level Changes.
3. Write short notes on:
 - a) Cost of Sales
 - b) Depreciation Adjustment
 - c) Monetary Working Capital Adjustment
 - d) Gearing Adjustment.

D. Practical Problems

1. Adjust the following Statement of Profit and Loss and Balance Sheet under CPPA method to ascertain the changes in net profit and reserve.

Statement of Profit and Loss for the year ending 31 st December 2014		(Rs. in 000's)
Sales		500
Less: Cost of goods sold:		
Opening inventory	80	
Add: Purchases	420	

Less: Closing inventory	500	
Gross Profit	70	430
Less: Administration expenses		70
Depreciation on buildings	25	
Net Profit	5	30
		40

Balance Sheet
as on 31st December 2014

(Rs. in 000's)

Share Capital		200
Reserve		200
		400
Land		140
Buildings	200	
Less: Depreciation	45	155
Stock	70	
Debtors	40	
Cash	30	
	140	
Less: Creditors	35	105
		400

Following further information are also given:

- (a) Closing stock was acquired during last quarter of 2014 and opening stock during the last quarter of 2013.
- (b) The land and buildings were acquired and the capital issued during 1998. The buildings are depreciated straight line over 40 years.
- (c) Sales, purchases and administration expenses are assumed to occur evenly over the year and hence at average prices.
- (d) The relevant retail price indices are:

2006 average	60
2013 last quarter average	108
2014 last quarter average	116
2014 average	114
2013 December 31	110
2014 December 31	118

(Answer: Net Profit – Rs. 30.89; Balance Sheet Total – Rs. 721.37).

2. Calculate the gearing adjustment from the following data under CCA method:

	Opening (Rs.)	Closing (Rs.)
Convertible Debentures	100	120
Bank Overdraft	60	80
Cash	10	30

Share Capital	150	200
Reserves	50	80

Cost of Sales Adjustment Rs. 20

Monetary Working Capital Adjustment Rs. 15

Depreciation Adjustment Rs. 5

Total Current Cost Adjustments Rs. 40

(Answer: Average Net Borrowings – Rs. 160; Average Shareholders' Fund – Rs. 240; Gearing Adjustment – Rs. 16).

3. Following are the Balance Sheets and Profit and Loss Account of a firm, prepared on the basis of historical cost accounting.

Balance Sheet
as on 1st April 2014

	Rs.		Rs.
Capital	400000	Plant and Machinery	200000
Profit and Loss Account	50000	Furniture	50000
Sundry Liabilities	150000	Stock	100000
		Debtors	80000
		Cash	170000
	600000		600000

Balance Sheet
as on 31st March 2015

	Rs.		Rs.
Capital	400000	Plant and Machinery	200000
Profit and Loss Account	145000	Less: Depreciation	20000
Sundry Liabilities	65000	Furniture	50000
		Less: Depreciation	5000
		Stock	80000
		Debtors	120000
		Cash	185000
	610000		610000

Profit and Loss Account
for the year ended 31st March 2015

	Rs.		Rs.
To Stock (on 01/04/2014)	100000	By Sales	1000000
To Purchases	760000	By Stock (on 31/03/2015)	80000

To Depreciation	25000		
To Other Operating Expenses	100000		
To Net Profit	95000		
	1080000		1080000

Additional Information:

- The replacement cost of the goods sold on the date of sales amounted to Rs. 800000.
- The current replacement cost of the stock on 31st March 2015 is Rs. 85000.
- On 31st March 2015, the replacement costs of the plant and machinery and furniture were Rs. 220000 and Rs. 40000 respectively.

Prepare Profit and Loss Statement for the year ended 31st March 2015 and Balance Sheet as on 31st March 2015 on the basis of Current Cost Accounting.

(Answer: Realised Holding Gain – Rs. 20000; Unrealised Holding Gain – Rs. 15000; Total Profit – Rs. 109000; Balance Sheet Total – Rs. 624000).