M.Com. ▪ Semester II Paper 421A

(New Syllabus 2023-24 Pattern as per NEP)

National Education Policy

ADVANCED ACCOUNTING - IV

▪ Dr. Ameya C. Lohar
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Prashant

This text book has been written in accordance with the revised syllabus as prescribed by B.O.S. in Commerce & Management Faculty, KBC North Maharashtra University, Jalgaon for M.Com. (NEP 2020 Pattern) w.e.f. June, 2023

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ADVANCED ACCOUNTING-IV

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PREFACE

Welcome to the advanced Accountancy paper at the Post Graduate Level, where our focus lies on fostering conceptual understanding and practical applicability of key accounting principles. This course builds upon the foundational knowledge acquired during undergraduate studies, aiming to equip students with the skills necessary for real-world application. The significance of this subject is continually magnified by factors such as Liberalisation, Globalisation, the Free flow of Capital, and the pursuit of better Corporate Governance Practices.

In this book, we delve into the vital Accounting Standards from a corporate standpoint, as well as introduce emerging Accounting Standards tailored to address the evolving corporate landscape. It is written in accordance with the New Education Policy (NEP).

Comprising six chapters, each section delves into a distinct facet of accounting. Chapter 1 initiates with Accounting Standards – offering an elementary study and Disclosure requirements of select Accounting Standards. The subsequent chapter, navigates through Accounting For Goods Of Small Value Under Hire-Purchase Transactions. Chapter Three unfolds the complexities of Accounting for Construction Contracts, followed by Chapter Four's exploration of Accounting for Foreign Branches. The Fifth chapter illuminates the Double Accounts System and Financial Statements of Electricity Companies, while the final chapter acquaints students with Developments In Accounting.

We trust that both students and educators will find this book immensely beneficial. While every effort has been made to ensure accuracy and clarity, we acknowledge the possibility of inadvertent errors. We extend our heartfelt gratitude to our families for their unwavering support and encouragement throughout this endeavor.

Special thanks to Prashant Publications, Director Shri. Rangrao Patil, Shri. Pradeep Patil, and the entire team for their expedited and meticulous publication process. We invite readers to share their valuable views, suggestions, and feedback with us via email at dr.ameya.c.lohar@gmail.com or abdulkadirarsiwala@gmail.com.

With Warm Regards.

- Authors

SYLLABUS

421A : Advanced Accounting-IV

M.Com | Sem. IV | w.e.f. Academic Year 2023-24 (NEP 2020 Pattern)

Unit 1 - Accounting Standards – Elementary study and Disclosure requirements of the following Accounting Standards – (Theory only) **(Lectures : 10)**

1.1 AS – 7 Construction Contract (Revised 2002) 1.2 AS – 11 The Effect of Changes in Foreign Exchange Rules (Revised 2003) 1.3 AS – 16 Borrowing Cost 1.4 AS – 17 Segment Reporting. (Theory Only)

Unit 2 - Accounting For Goods of Small Value Under Hire- Purchases Transactions **(Lectures : 10)**

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Unit 3 - Accounting For Construction Contract **(Lectures : 10)**

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Unit 4 - Accounting For Foreign Branches **(Lectures : 10)**

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Unit 6 – Developments In Accounting (Theory only) **(Lectures : 10)**

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Accounting Standards

1.1 AS – 7 Construction Contract (Revised 2002)
1.2 AS – 11 The Effect of Changes in Foreign Exchange Rules (Revised 2003)
1.3 AS – 16 Borrowing Cost
1.4 AS – 17 Segment Reporting

Introduction :

Accounting Standards are written policy documents that are issued by the Government with suggestions of regulatory bodies like Ministry of Corporate Affairs (MCA) covering the following aspects in financial statements

- Recognition
- Measurement
- Presentation
- Disclosure

The Accounting Standards help to bring about uniformity in preparation of financial statements and ensure timely dissemination of useful information to investors and other stakeholders on timely basis.

In this chapter we shall be discussing following four Accounting Standards in detail

- AS – 7 Construction Contract (Revised 2002)
- AS – 11 Effects of changes in Foreign Exchange Rules (Revised 2003)
- AS – 16 Borrowing Costs
- AS – 17 Segment Reporting

1.1 AS-7 Construction Contract (Revised 2002) :

AS-7 Construction Contract describes accounting treatment in respect of costs and revenues in construction contracts. This accounting standard is primarily used in accounting of construction contracts in the books of contractors or construction companies.

A construction contract is a contract which is which is specifically entered into for construction of a particular asset or a group of assets that are either interdependent or closely linked to one another having regards to technology / design / function or their ultimate use.

For the purpose of this standard, construction contracts includes :

- Contracts for rendering of services which are directly related to construction of assets for ex : salaries paid to chief architect.
- Contracts for restoration or destruction of assets or restoration of environment following the demolition of assets.

Types of contracts :

Fixed Price Contract : It is a contract in which contractor agrees to a fixed contract price. In some cases, the parties involved may mutually agree to enter an escalation clause in contract. For example, the parties agree to include a clause in the contract for adjusting the Contract price on the basis of an increase in the cost of raw materials.

Cost Plus Contract : It is a contract where the contractor is reimbursed for agreed costs / total cost incurred in a contract plus a certain percentage of these costs a fixed fee.

Combining and Segmenting of Construction Contracts :

Combining of contracts : A group of contracts either with the one or more customers shall be considered as a single construction contract if

- all the contracts are negotiated as a single package.

- they are interlinked and form a part of a single project.
- they are performed in a continuous sequence.

Example : a contract to construct three multistory buildings on a single plot of land as a part of housing society negotiated all at once.

Segmenting of contracts : Where a contract includes more than one asset, the construction of each asset shall be treated as separate construction contract when separate proposals have been given for each asset and there have been separate negotiations for each individual asset and the costs and the revenues associated with each asset can be identified separately.

For example, a contract for construction of three different buildings on the same plot with different specifications and each building is separately negotiated with the contractor.

Costs and revenues of a contract :

The cost of a contract includes the following :

- Costs that are directly related to specific contract.
- Costs which are generally attributable and allocated to the contract activities.
- Other costs which are specifically chargeable to the customer under the terms of the contract.

These costs may be reduced by any incidental income which is not a part of contract revenue for ex: income from sale of surplus materials or disposal of plant and machinery after the completion of contract.

The costs which cannot be directly attributed to the contract activity or cannot be allocated to contract on some suitable basis are not to be included in the cost of construction. Such costs include :

- General administration costs.
- Selling costs.
- Research and development costs.
- Depreciation of idle plant and machinery which is not used on a particular contract.

The revenue from a contract includes the following to the extent it is probable of generating revenue and is measurable :

- The initial amount of revenue agreed in the contract.
- Incentives and claims on account of variations in contract work.

Variation is an instruction by the customer for change in scope of work to be performed under a contract. A variation may lead to increase or decrease in the contract revenue. Some of the examples of variation are changes in specifications, changes in design, changes in duration of the project etc. a variation in contract in included in the contract revenue if.

- It is probable that the customer will approve the variation and amount of revenue arising therefrom

- Amount of revenue can be reliably measured.

A claim is an amount that a contractor seeks to collect from a customer for reimbursements of costs not included in the contract price. A claim may arise due to various reasons like delay on the part of customer, errors in specifications or designs provided by customer etc. recognition of revenue arising from claims Is subject to high level of uncertainty as the outcomes often depends upon the negotiations with the customer. The claims are included as a part of revenue only if -

- Negotiations have reached an advanced state and it is probable that the customer will accept the claims.
- The amount of claim that will be accepted by the client can be measured reliably.

Incentive amounts are additional amounts which are payable to the contractor if specified performance parameters are met or exceeded by the contractor. The incentives are included as the part of revenue only if -

- Contract is sufficiently advanced that it is probable that the specified performance parameters will be met/ exceeded.
- The amount of such incentive payment can be measured reliably.

Recognition of cost and revenue from a contract :

Where the outcome or result of any construction contract can be projected, the costs and revenue related to such contracts shall be recognised by taking into account the stage of completion of such contract. If any losses are expected from such contracts then they shall be recognised immediately.

In case of a fixed price contract, the outcome can be estimated in a reliable manner when all the following conditions are satisfied:

- The entire revenue from a contract can be reliably measured
- It is apparent that the economic benefits of such contract will flow to the organization
- Both contract costs and stage of completion can be measured
- Contract costs can be clearly identified for a comparison between actual costs and prior estimates.

In case of a cost-plus contract, the outcome can be estimated in a reliable manner when all the following conditions are satisfied:

- It is probable that economic benefits of the contract will flow to the organization.
- Contract costs attributable to the contract can be identified and measured clearly.

Percentage of completion method : This method defines the recognition of costs and revenues after taking into account the stage of completion of the contract. Under this method, the revenue and cost of the contracts are recognised in statement of profit and loss in accounting period in which work is performed.

Contract Work-in-progress : Sometimes a contractor may incur costs that relate to future activity in a contract. Such costs shall be recorded as assets if they are probable to be realised/ recovered.

Determination of the stage of completion :

Depending on the nature of the contract, the stage of completion of a contract may be determined in different ways. The methods may include :

- The proportion of contract cost incurred with respect to the total estimated cost of contract; (for example: if the total cost of the contract is Rs. 50 lakhs and the cost incurred till date is Rs. 25 lakhs, the stage of completion is regarded as 50% complete i.e. 25 lakhs / 50 lakhs)
- By Survey of the work performed; (for example: in a contract for construction of a Dam, the site inspector can do a survey and with regards to the technicalities of the project, inform how much work has been completed)
- By completion of a physical proportion of contract work (for example: in a contract for construction of a ten-storey building, if six stories are complete, the stage of completion for the same is regarded as 60% i.e. 6 stories/10 stories)

However, when the outcome of a construction contract cannot be estimated by any of the above means, then the revenue and cost should be recognized only to the extent of contract costs incurred whose recovery is probable.

Recognition of Expected Losses :

In a situation where it is expected that the total contract costs will exceed total revenue from such contract, the expected losses should be immediately recognized as expenses. The amount of such losses shall be determined irrespective of the following :

- The work has commenced on the contract or not
- The stage of completion
- The number of profits expected to arise on other contracts which are segmented as explained above.

Disclosures required in financial statements :

An organization undertaking construction contract work should disclose :

1. Contract revenue recognized during the accounting period.
2. The methods used to determine the contract revenue recognized in the period.
3. The methods used to determine the stage of completion of contracts in progress.

Following disclosures w.r.t. contracts in progress shall also be given at the reporting date:

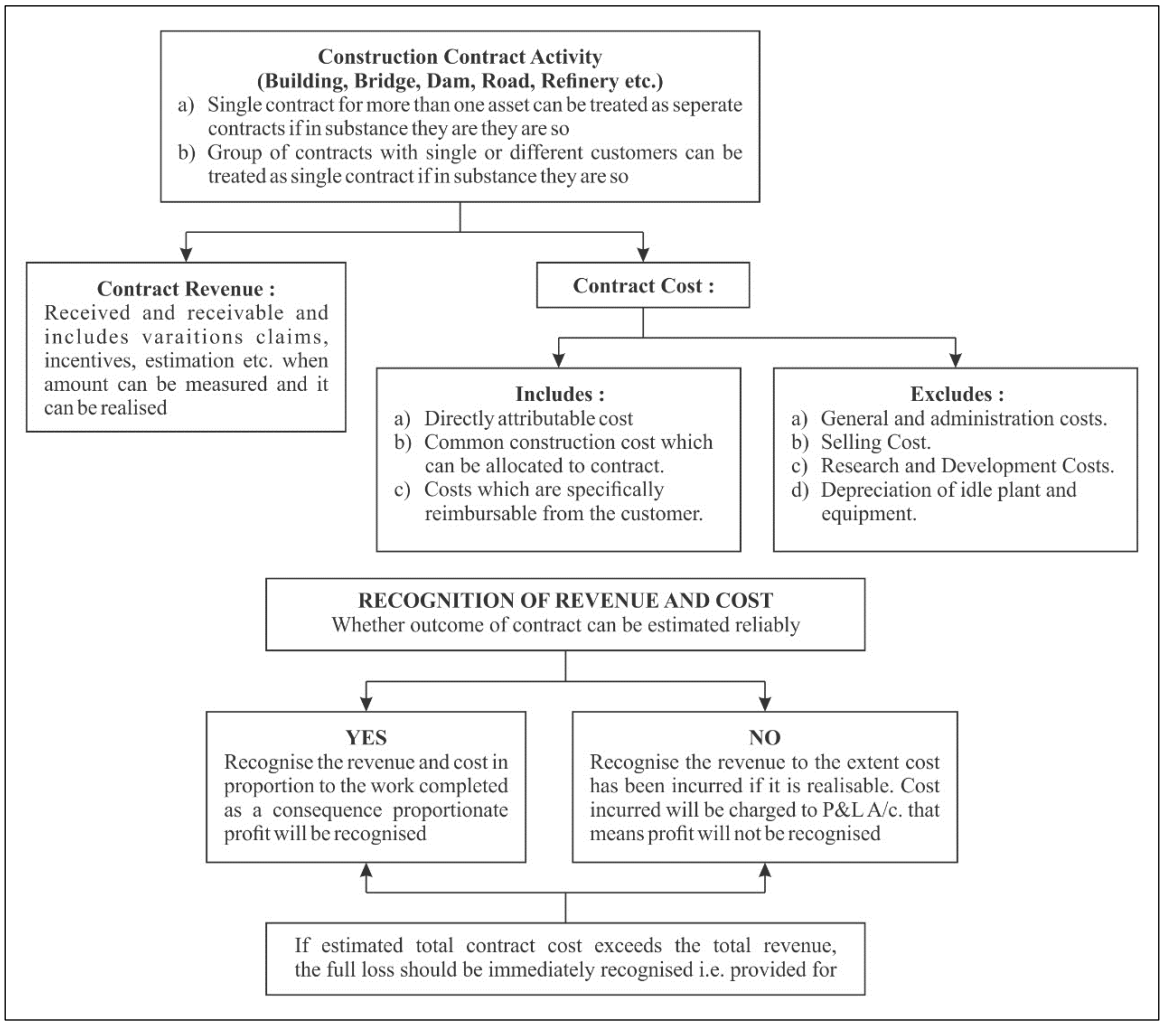
1. An aggregate cost incurred and net profits recognized.
2. The amount received as advances from the client. Advances are amounts received by the contractor before the related work is performed.

3. The amount kept as retention by the client. Retention is such amounts which are paid only after satisfying the conditions specified in the contract for payment of such amounts.

An organization should present :

1. The gross amount due from customers for contract work as an asset;
2. The gross amount due to customers for contract work as a liability.

An organisation can disclose any contingencies in accordance with AS-4 on contingencies and events occurring after balance sheet date, contingencies may arise from such items as warranty costs, penalties or possible losses.



1.2 AS – 11 The Effects of Changes in Foreign Exchange Rules (Revised 2003):

A Business may be involved in foreign currency transactions in number of ways where the payment or receipt of money is in foreign currency. To include foreign currency and foreign operations in the financial statements, these transactions should first be expressed and reported in financial statements in the reporting currency of the enterprise. AS 11 The Effects of Changes in Foreign Exchange Rates deals with the reporting of foreign exchange transactions in the financial statements.

The principal issue in accounting of foreign operations or foreign currency transactions is determining the exchange rate to be used and guidance on recognizing the financial effect of changes in exchange rates in the financial statements. The standard deals with both of these issues. The standard also deals with transactions in foreign currency which are in the nature of forwarding exchange contracts.

The standard does not specify the currency in which companies should represent their books of accounts. A company normally uses currency of the country in which it is domiciled for reporting purposes. In case it employs a different currency, the Standard necessitates disclosing the reasons for the same. The Standard also requires disclosing the reasons for any change in reporting currency.

AS 11 does not deal with restating financial statements of any business from a reporting currency into another currency for the easing the users accustomed to such currency or for such similar purposes.

The Standard also does not deal with presentation of the cash flow statement of cash flows arising due to transactions in the foreign currency and translation of such cash flows of foreign operations.

Foreign Currency Transactions :

Initial recognition :

A foreign currency transaction is any transaction that is denominated in a foreign currency or it needs to be settled in a foreign currency. Such foreign currency transactions must be initially recorded, reporting currency, by applying the exchange rate between the foreign currency and the reporting currency to the foreign currency amount on the date of the transaction.

Reporting at subsequent Balance Sheet Dates :

On every Balance sheet date :

- All the foreign currency monetary items must be reported at closing rates. In specific circumstances closing rate might not exhibit with reasonable accuracy amount in the reporting currency which is expected to be realized from the transaction. In such cases the foreign currency monetary items must be reported in reporting currency at a value which is needed to be incurred or expected to be realised at the balance sheet date.

- Non-monetary items that are carried in terms of historical cost denominated in a foreign currency should be reported in reporting currency using the exchange rate at the date of the transaction.
- Non-monetary items that are carried at the fair value or similar valuation denominated in the foreign currency must be reported at the exchange rates prevailing when such values were determined.

Recognition of Exchange Differences :

Exchange differences which arise on reporting the enterprise's monetary items at the rates different from the ones at which they're recorded initially must be recognized the income or as an expense.

Example :

Silver Ltd. bought fixed assets worth 5,000 lakh on 1-4-2022 and was financed by a foreign currency (US Dollar) loan which is payable in 3 equal annual installments. The exchange rates were 1 Dollar = INR 75.90 and INR 82.11 as on 1-4-2022 and 31-3-2023 respectively. The initial installment was rendered on 31-3-2023 The total difference in the foreign exchange is capitalized. Here, these transactions would be accounted as follows.

According to AS-11, exchange differences which arises on reporting the enterprise's monetary items or settlement of monetary items at the rates different from the ones at which they're recorded initially during the period, or reported in the previous financial statements, must be recognized as an income or an expense in the period in which it arises.

Foreign currency ($) loan = 5,000 lakh ÷ 73.25 (Exchange rate on 01-04-2022) = USD 65.87 lakhs

Exchange difference = USD 65.87 lakhs × (82.11 – 75.90) = INR 409.05 lakhs. Hence, the entire loss arising due to the exchange differences of INR 409.05 lakhs must be charged to the profit and loss account for the respective year.

As per the above example, the exchange difference should be taken to the profit or loss statement, notwithstanding the exchange difference which arises on the revenue account or the capital account. However, the Union Government of India, vide its notification issued on March 31st, 2009, inserted the below-mentioned paragraphs in the AS 11 The Effects of Changes in Foreign Exchange Rates.

"The exchange differences which arises on the account of a depreciable asset isn't required to be charged to the profit or loss statement and might be added or reduced from the cost of such asset. This addition or reduction should be depreciated together with the asset over the useful life of such depreciable asset."

1.3 AS 16 Borrowing Costs :

The main objective of this Accounting Standard is to prescribe principles for accounting for borrowing costs. As per ICAI "Borrowing Costs are interest and other costs incurred by an enterprise in connection with the borrowing of funds". This Accounting Standard is mandatorily applicable to all the business enterprises.

The Accounting Standard is applicable to External Borrowings and does not deal with cost of raising Equity or Convertible Preference Shares. The following points should be taken into consideration for borrowing costs:

- Interest on long term debts / short term loans should be included as a part of borrowing costs.

  Example : Interest paid to financial institutions for loan taken to acquire the asset must be included in the borrowing costs.
- If an enterprise has incurred any discounts or premiums related to the borrowing cost, then it will also be amortised as borrowing costs.

  Example : Amount paid to financial institutions/ banks as a processing fee for loans should be amortised in the borrowing costs.
- If a business has incurred any finance/ancillary cost in connection with the borrowings, then it will also be amortised as borrowing costs.

  Example : Amount paid to professionals for preparing project report.
- If a business has acquired any asset under finance lease or any other similar arrangement, then those finance cost will also be amortised.

  Example : Leasing cost paid to the lessor every year.
- If a business has taken any borrowing in foreign currency, then the exchange rate fluctuation will also be amortised to the extent they are regarded as an adjustment of interest costs.

  Example : An enterprise has taken a loan from foreign financial institutions when the rate of US $ was 74, while at the end of the financial year the rate of US $ was 76. The rate difference of US $ 2 will be treated as Borrowing Cost.

Qualifying Assets :

Qualifying Assets are those assets which take substantial time to be ready for the intent of sale or use. Substantial period primarily depends on the facts and circumstances of the case. Generally,

a period of 12 months is considered as a substantial period unless a shorter or longer period can be justified.

Borrowing costs are capitalized in the books of accounts with the qualifying assets only when it is certain that it will have future economic benefits. Any other borrowing costs must be treated as an expense in the period in which they are incurred.

Thus, following conditions should be satisfied for borrowing costs to be capitalized :

- Only those borrowings costs which are directly attributable to the acquisition, construction or production of qualifying asset, are eligible for capitalization. Directly attributable costs are those costs which could have been avoided completely if the expenditure on the qualifying asset was not made.
- Qualifying assets will give future benefit to the enterprises and the cost can be measured reliably.

Types of Borrowings :

There are two types of borrowings; Specific Borrowing and General Borrowing. Amount of borrowing costs for each of the above is capitalized as under.

Specific Borrowings : in case of specific borrowing, the amount to be capitalized is :

Actual Borrowing Cost incurred during the period - Any income on temporary investment of borrowed funds

General Borrowings : The amount to be capitalized involves following steps

- Calculate Capitalization Rate, It will be weighted average of borrowing cost.
- Cost to be Capitalized = Capitalization rate X Amount spent on qualifying asset out of general borrowing.

Note : Amount of borrowing cost capitalized during a period should not exceed the amount of borrowing cost incurred during the period.

Commencement of Capitalization :

The Capitalization of borrowing cost should commence if all the conditions below are fulfilled:

1. Expenditure for the acquisition, construction or production of a qualifying asset has been incurred. Here expenditure includes those expenditure in the nature of cash or transfer of any asset or the assumption of interest-bearing liabilities
2. Borrowing Costs are being incurred.
3. Activities that are necessary to prepare the asset for its intended use or sale are in progress. The activities here need not be the physical activities, but the technical and administrative work related to the assets is also taken into consideration.

If there is a temporary delay in which the active necessary developments are interrupted then there will be a suspension of capitalization. However, if the temporary delay is necessary part of

the process of getting an asset ready for its intended use or sale, then there will be no suspension of capitalization.

Capitalization of borrowing cost ceases when all the activities necessary to prepare the qualifying assets are complete. If an asset has been completed in parts and a completed part is capable of being used while the construction for the other part continues then the capitalization for that completed part will cease. Example: A business park consists of several buildings and each building can be treated as an individual part.

Disclosures :

The Financial Statements should disclose the following :

1. The accounting policy adopted for borrowing costs.
2. The amount of borrowing costs capitalized during the year.

Example : Aqua Ltd. obtained a loan from a bank for Rs. 1 crore on 30th April 2022. Aqua Ltd utilized the money as follows:

- **Construction of Shed** : Rs 1 crore
- **Purchase of Machinery** : Rs 80 Lakhs
- **Working Capital** : Rs 40 lakhs
- **Advance for purchase of truck** : Rs. 20 Lakhs

Construction of shed was completed in March 2023. The Machinery was installed on the same day. Truck was not yet received. Total interest charged by the bank was Rs 36 Lakhs. The treatment will be as follows:

Qualifying Assets as per AS -16 = Rs 1 crore (Construction of shed)

Borrowing Cost to be Capitalized = 36 X 1,00,00,000 / 2,40,00,000 = 15,00,000

Interest to be debited to Profit & Loss A/c= 36,00,000 – 15,00,000 = 21,00,000

AS 16 in a Gist :

OBJECTIVE
To prescribe accounting treatment for borrowing costs

KEY TERMS

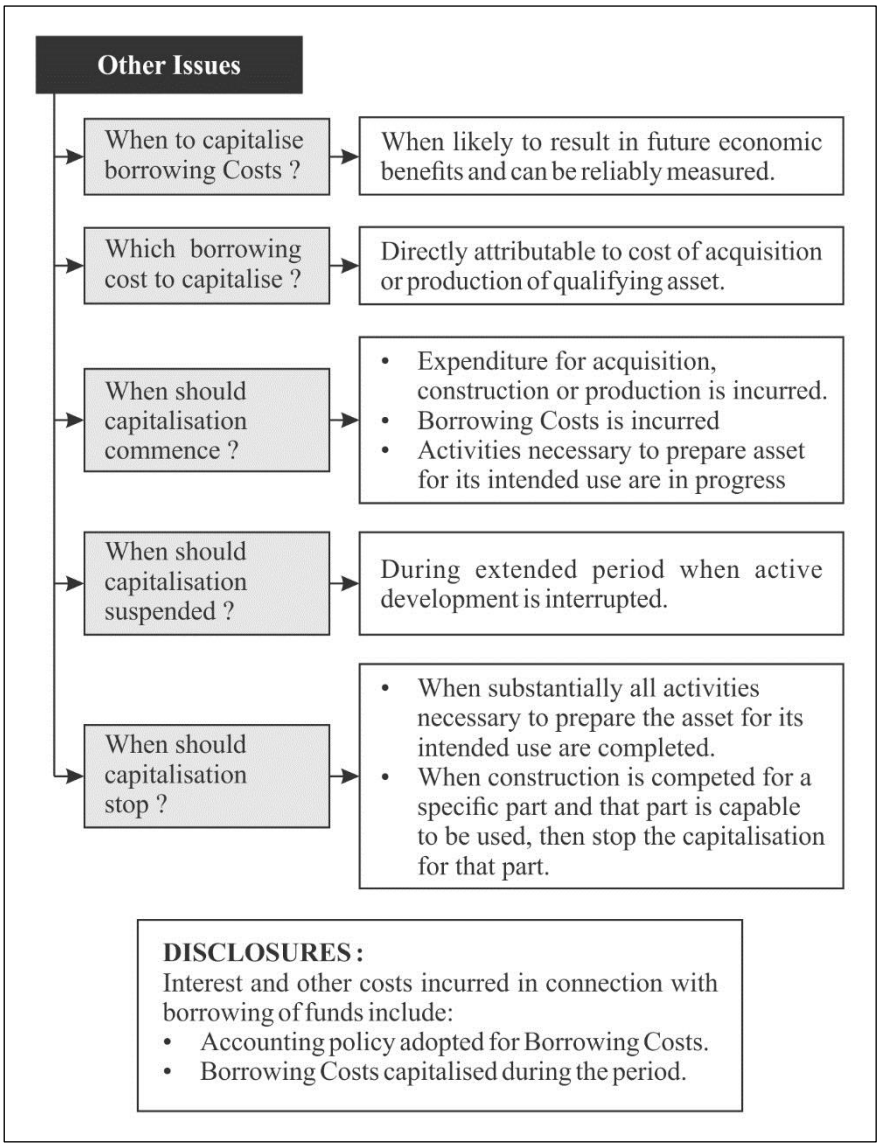
BORROWING COSTS
Interest and other costs incurred in connection with borrowing of funds include:
- Interest and commitment charges
- Amortisation of discounts/ premiums on loans
- Lease finance charges
- Exchange rate differences relating to foreign currency borrowings.

QUALIFYING ASSETS
Takes substantial period of time to get ready for its intended use for sale (substantial period of time is generally 12 months. It can be shorter or longer also.

AMOUNT TO BE CAPITALISED

When funds are borrowed generally :
- Apply capitalisation rate to the expenditure on qualifying asset.
- Capitalisation rate is the weighted average of Borrowing Costs that are outstanding during the period.
- Capitalisation should not exceed the borrowing cost incurred.

When funds are borrowed specifically :
Actual borrowing costs – Income from temporary investments of these borrowings.



1.4 AS-17 Segment Reporting :

Accounting Standard 17 on segment reporting is related to reporting of the operating segments of a company in the disclosures accompanying its financial statements. Segment reporting is intended to give information to investors and creditors regarding the financial results and position of the most important operating units of a company, which they can use as the basis for decisions related to the company.

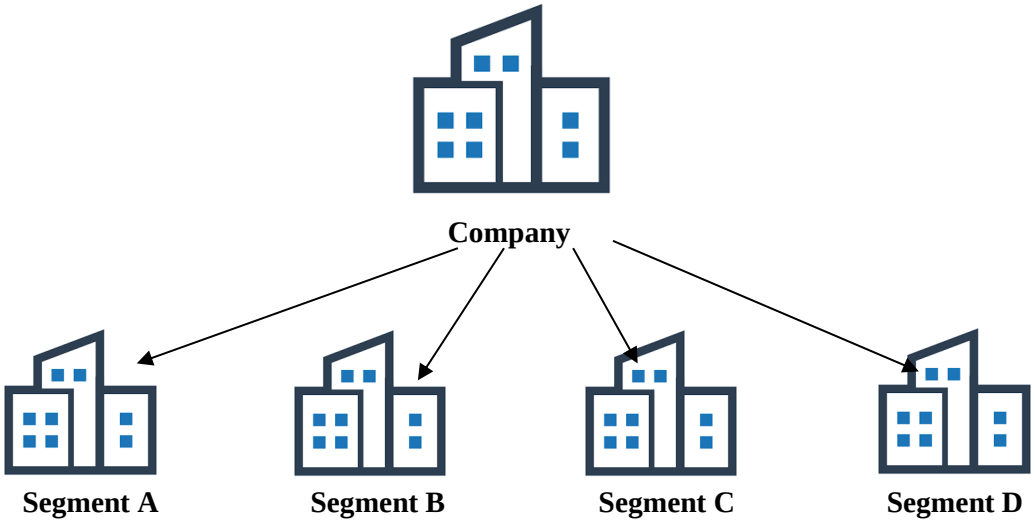
Applicability of As-17 : As-17 is applicable to following categories of enterprises.

- Enterprises having or debt securities listed in India and outside India.

- Enterprises which are in process of listing their equity or debt securities as acknowledged by board of directors.
- Banks including cooperative banks.
- Financial institutions.
- Enterprises which are engaged in insurance business.
- Enterprises having turnover exceeding Rs. 50 crores (excluding other income) immediately preceding the accounting period.
- Enterprises having borrowings including public deposits exceeding Rs. 10 crores during a given accounting period.
- Holding or subsidiary companies of any of the above enterprises during the abve accounting period.

Important Definitions :

Business segment : Business segment is a distinguishable unit of an enterprise which is engaged in providing individual product or service or a group of related products or services. Such a business segment is subject to risk and returns that are different from those of other business segments.

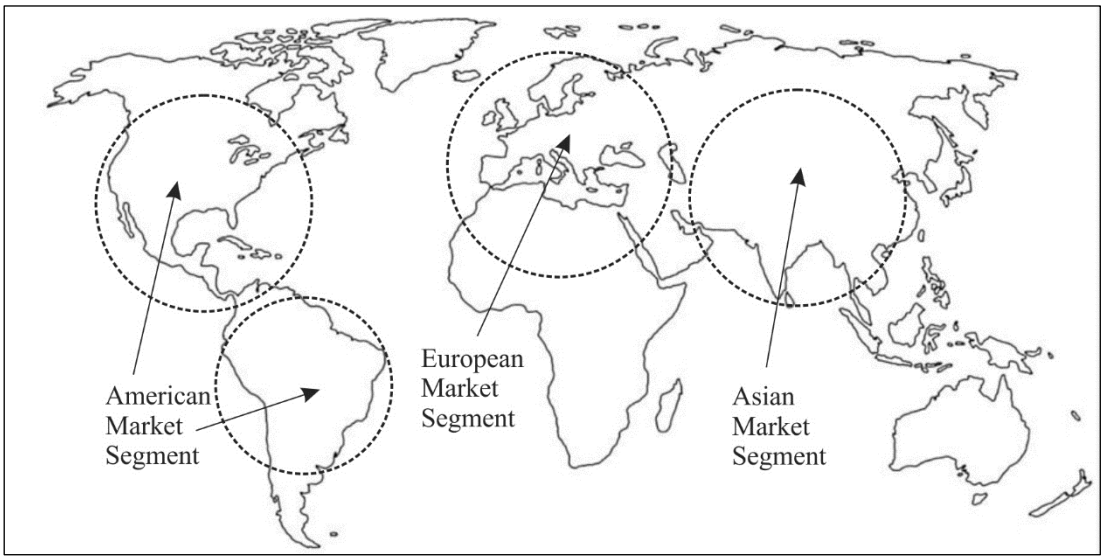


Business Segments

Geographical segment : Geographical segment is a distinguishable unit of an enterprise engaged in providing products or services within a particular economic environment. Such a segment is subject to risk and returns that are different from units operating in other economic environments.

Reportable Segment : It is a business or geographical segment of a business enterprise for which segment information is required to be disclosed.

Enterprise Revenue : It is revenue of a business enterprise from sales made to external customers as reported in profit and loss statement.



Geographical Segment

Segment Revenue : It is the total of following

1. Portion of enterprise revenue directly attributable to a segment.
2. Portion of enterprise revenue that can be allocated on a reasonable basis to a segment.
3. Revenue derived by a segment from transactions with other segments of the enterprise.

Segment Expense : It is the total of the following

1. Expense resulting from the operating activities of a segment which can be directly attributable to the segment
2. Portion of enterprise expense that can be allocated on a reasonable basis to the segment.
3. Expense related to transactions with other segments of the enterprise

Segment Result : It is the difference between segment revenue a segment expense.

Segment Assets : These are as follows

1. Operating assets employed by a segment in its operating activities.
2. Assets that are either directly attributable to a segment or can be allocated to a segment on a reasonable basis.

Segment Liabilities : These are as follows

1. Operating liabilities employed by a segment in its operating activities of a segment.

2. Those liabilities which can either directly be attributed to a segment or can be allocated to a segment on a reasonable basis.

Identifying Reportable Segments :

In order to determine whether enterprise will consider business segments or geographical segments as the primary segment reporting format, the dominant source and nature of risks and returns of an enterprise are considered.

- The Business Enterprise should adopt Business Segment as its primary format of reporting segment information if the risks and returns of an enterprise are majorly impacted by variations in the products and services it produces.
- The Business Enterprise should adopt Geographical Segment as its primary format of reporting segment information if the risks and returns of an enterprise are majorly impacted by the geographical areas in which it operates.

To identify the predominant source of risks and returns of an enterprise following points are considered :

- Internal organization and management structure of an enterprise.
- The system of the internal financial reporting to the top management.

There can be two possibilities :

- The enterprise can consider business segments as its primary segment reporting format and geographic segments as its secondary format. This is the case when risk and returns of an enterprise get majorly affected both by differences in products and services it produces and by differences in geographical areas in which it operates.
- The enterprise can choose business segments or geographic segments as its as primary segment reporting format with the other as its secondary reporting format using its judgement. This is the case where the internal organization and management structure of an enterprise and its system of internal financial reporting to the top management are neither based on individual products or services nor on geographical areas.

Reportable Segments :

A business segment or geographical segment is identified as a reportable segment if following conditions are satisfied :

- Revenue from sales to external customers and from transactions with other segments is 10% or more of the total revenue of all segments
- Segment result is 10% or more of the following whichever is greater in absolute amount:
  - combined result of all segments in profit
  - combined result of all segments in loss
- Segment assets are 10% or more of total assets of a segment.

Segment Accounting Policies : Segment information must be prepared as per the accounting policies adopted for preparing and presenting the enterprise's financial statements. Furthermore, assets and liabilities that jointly relate to two or more segments should be allocated to the respective statements. Provided their related revenues and expenses are allocated to such segments.

Primary Reporting Format :

Following are the items that a Business Enterprise must disclose for each reportable segment :

- Segment revenue.
- Segment result.
- Total carrying amount of segment assets.
- Total amount of segment liabilities.
- Cost incurred in a given period to acquire segment assets expected to be used during more than one period.
- Expense included in segment result for depreciation and amortization pertaining to the segment assets for the period.
- Significant non – cash expenses other than depreciation and amortization in respect of segment assets that were included in segment expense and thus deducted while measuring segment result.

An enterprise need not disclose depreciation and amortization expense as well as non cash expenses of a segment if it reports the amount of cash flows arising from operating, investing and financing activities of such a segment.

Additionally, Enterprise should also present reconciliation between information disclosed for reportable segments and aggregated information in the enterprise financial statements.

Secondary Segment Reporting :

If the Primary Segment Reporting Format is Business Segments : If the primary format of segment reporting is business segments, following information should also be reported.

- Segment revenue from external customers by geographical area based on the geographical location of its customers if the revenue from sales to external customers for each geographical segment is 10% or more of enterprise revenue.
- Total carrying amount of segment assets by geographical location of assets provided the segment assets for each geographical segment are 10% or more of the total assets of all geographical segments.
- Total cost incurred during the period to acquire segment assets expected to be used for more than one period by geographical location of assets. Provided segment assets for each geographical segment are 10% or more of total assets of all geographical assets.

If the Primary Segment Reporting Format is Geographical Segments : If the primary format of segment reporting is geographical segments (whether based on location of assets or

location of customers), the business enterprise should also report segment information for each business segment having revenue from sale to external customers equal to 10% or more of enterprise revenue or having segment assets equal to 10% or more of total assets of all business segments.

:: EXERCISE ::

Answer the following questions:

1. Explain the two types of construction contracts.
2. What do you understand by combining and segmenting of construction contracts ? When shall combining or segmenting of contracts be undertaken?
3. How will cost and revenue from a contract be recognised as per AS 7 ?
4. Explain how is the stage of completion of a contract determined as per AS 7.
5. Explain the disclosure requirements for construction contracts under AS 7
6. Explain the scope of AS 11 "The Effects of Changes in Foreign Exchange Rates". Also state, the exchange rates to be used for reporting foreign currency transactions at the time of their initial recognition as well as at the time of subsequent balance sheet date.
7. Explain how difference in exchanger ates are recognized and recorded in the books as per AS 1.
8. Explain the objective and applicability of AS 16 on Borrowing Costs.
9. What are the qualifying assets as per the AS 16 on Borrowing Costs ?
10. As per AS 16, when should borrowing costs be capitalized ?
11. Explain the applicability of AS 17 on Segment reporting.
12. Explain the following terms:
    i) Business Segment
    ii) Geographical Segment
    iii) Segment Revenue
    iv) Segment Expense.
13. How are reportable segments identified as per AS 17 ?
14. Explain the disclosure requirements as per AS 17.

***

CHAPTER 2

Accounting for Goods of Small Value Under Hire – Purchases Transactions

2.1 Introduction
2.2 Preparation of Hire Purchase Trading Account in the books of hire vendor under
a. Debtors Method
b. Stock and Debtors Method

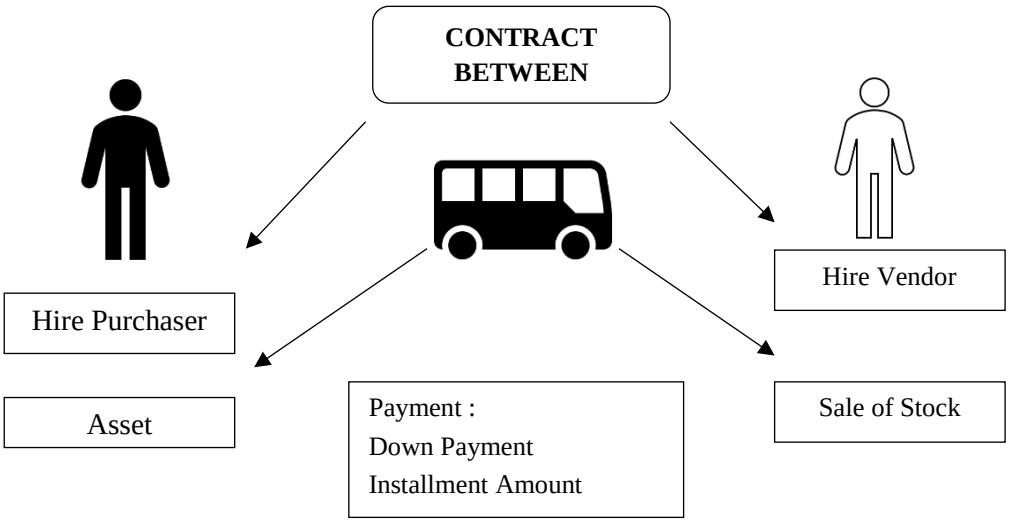
2.1 Introduction :

With the advancement of technology and improvement in the standard of living of the people, there has been an increased demand of consumer durables like Air conditioners, Refrigerators, Automobiles etc. To meet the increased demand, the dealers have come up with innovative schemes to attract the consumers towards the products offered by them. One such method is Hire Purchase Method. In this method of selling goods, the price of the product is paid in instalments over a period of time.

Features of Hire Purchase System :

- The Hire Vendor merely gives the possession of the goods to the buyer at the time of down payment.
- The buyer has to pay the price of goods in regular installments over an agreed period along with the interest.
- The ownership of the goods gets transferred to the buyer only when the last installment is paid.
- The buyer can return the goods at any time before the last installment is paid, but they will not get any refund on the amount already paid as installments.
- The Hire vendor can reposes the goods if the buyer fails to pay installments on due date.

- The goods purchased by the buyer shall be in the nature of Fixed Assets and not goods for consumption or resale.



Hire Purchase System

Installment Sale :

- In installment system the possession as well as ownership of the goods passes to the buyer immediately at the start of the contract.
- The buyer has to make regular payment by way of installments over an agreed period of time including interest.
- The vendor cannot reposes the goods if the buyer fails to pay the installment. He will have to file a suit in the court for recovery of the amount.

The transactions of small value goods which are sold on hire purchase system usually take place between Retailer/Dealer (Hire Vendor) and consumers and not between two business units. So, the accounting for such transactions is important only in the books of Vendor and not the buyer.

2.2 Important Concepts relating to Hire Purchase Accounting :

A dealer may have numerous hire purchase transactions of goods of small value with many different buyers. In such a case it becomes very difficult for the vendor to maintain a separate account for each transaction. Hence the accounting system is designed in such a way that overall control can be exercised on all transactions during a particular accounting period by using control accounts. Information on individual accounts may be kept in a subsidiary book called “Hire

Purchase Sale Register" which will show necessary information required to control individual accounts of the buyers.

Sr. No	Date of Agreement	Name of the goods	Name of the customer	Cost Price	Hire Purchase Price	Down payment	No. of Instalments	Instalments due				instalments recd.	Instalments due but not recd.	Installments not yet due
								1	2	3	4			

Sample Hire Purchase Sales Register

The sample Hire purchase Sales Register contains details of individual hire purchase transactions. It also contains the columns showing cost price of goods, hire purchase price, down payment, total number of installments, number of installments due, installments received, installments due but not received and the installments not yet due. These figures are very important from the point of view of preparations hire purchase accounts and ascertaining the profit on hire purchase transactions. The totals of this account shall be taken on monthly/ quarterly basis and posted to their relevant control accounts by passing the necessary journal entries.

Important Concepts :

Before we move ahead on solving practical problems of accounting for goods of small value under hire purchase and ascertain the profit or loss on such transactions, it is imperative that we define and discuss some of the Important concepts.

1) **Cost of Goods sold on Hire Purchase :** the hire purchase vendor purchases the goods from various manufacturers and sell them to the customers under hire purchase system. At the time of selling the goods he sells them at a higher price to cover his profits, loss of interest on such transactions. This profit is worked out on the basis of difference between cost price and hire purchase price. This profit is also referred to as "loading" and it is generally given in terms of percentage of cost price or hire purchase price.

2) **Goods Sold on Hire Purchase :** to find out the profit or loss incurred in the hire purchase business; we first need to find out the value of the goods which are sold on hire purchase. This value is usually given for the accounting period. However, if in some circumstances the value is not given then it can be calculated by applying the loading rate to the cost of goods sold on hire purchase.

3) **Cash received :** This refers to the total amount received during the accounting period from hire purchase sales. Hire purchases sales may relate to current accounting year or they may be of previous years and include the amount of down payment and amount of installments paid during the year.

4) **Hire purchase debtors :** the term is known as "Installment due but not yet paid". Thus it refers to the total amount of installments that have become due during the accounting period but the payment of which has not yet been made by the hire purchase customer. The profit on hire purchase business is calculated as

Profit from Hire Purchase Business = Cash Received + Hire Purchase Debtors

5) **Hire purchase stock :** the term hire purchase stock refers to those installments which have not yet become due. When goods are sold on hire purchase, the customer makes some down payment and agrees to pay the balance amount in installments. The installments which have not become due in the current accounting year are classified as hire purchase stock. It is to be noted that this term is not to be confused with stock of goods at shop. **It is a special term which is used to refer total amount of installments which have not become due during the current accounting year.** It represents unrealised sales and amount of "Loading" is required to be adjusted from it to ascertain the true profit or loss from hire purchase business.

6) **Stock at shop :** Stock at shop refers to the unsold stock lying in the store. Since these goods are lying in store and not yet sold on hire purchase basis, the amount is not relevant for calculating profit or loss from hire purchase transaction. However, this amount can be helpful in ascertaining the cost of goods sold on hire purchase system.

Debtors Method :

To calculate the profit or loss from goods of small value sold on hire purchase basis, we will have to prepare "Hire Purchase Trading Account". This account is similar to Consignment Account prepared at the time of goods sold on consignment basis. The following figures will be required to prepare Hire Purchase Trading Account.

- Goods sold on hire purchase.
- Cash received.
- Goods repossessed.
- Opening and closing values of hire purchase debtors.
- Opening and closing values of hire purchase stock.

These figures can be extracted from hire purchase sales register or relevant control accounts and transferred to hire purchase trading account by passing necessary journal entries. While

computing profit, we shall also have to ascertain the amount of expenses incurred on hire purchase business and the percentage of loading applicable. A proforma of hire purchase trading account is given below.

Hire Purchase Trading Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To H.P. Stock (Opening) To H.P. Debtors (Opening) To Goods sold on H.P. (at H.P. price) To Stock Reserve (Loading on closing Hire purchase stock) To Expenses To Net Profit (transferred to Profit & Loss A/c)		By Cash Received By Goods repossessed (market value) By H.P. Stock A/c (Closing Balance) By H.P. Debtors (Closing Balance) By Stock reserve (Loading on opening Hire purchase stock) By Goods sold on H.P. (Loading)	

The proforma Hire Purchase Trading A/c is prepared in the format given above and profit from hire purchase is ascertained. Alternatively, the above account can be prepared in two parts as shown below.

Hire Purchase Trading Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To H.P. Stock (opening) To H.P. Debtors (opening) To Goods sold on H.P. (at H.P. price)		By Cash Received By Goods repossessed (market value) By H.P. Stock A/c (Closing Balance) By H.P. Debtors (Closing Balance)	
To Stock Reserve (Loading on closing Hire purchase stock) To Expenses To Net Profit (transferred to Profit & Loss A/c)		By Stock reserve (Loading on opening Hire purchase stock) By Goods sold on H.P. (Loading)	

The Above proforma Hire Purchase A/c is more suitable as the first part contains only those items which are recorded at Hire Purchase price and the second part shows the adjustments relating to loading, expenses etc. relating to hire purchase to ascertain the profit of loss.

The first part of the above hire purchase account will always be equal. Both debit side and credit side of the first part will tally. If they are not equal then it means there is some mistake in the calculations. The first part can also be helpful in finding missing information (being the balancing figure) provided all other figures are given.

Let us now solve one illustration to find out how profit is ascertained in respect of goods of small value which are sold on hire purchase by preparing Hire Purchase Trading Account.

Stock and Debtors Method :

The profit or loss from goods sold on Hire Purchase System can also be ascertained by using another method known as Stock & Debtors Method. This system is similar to the Stock & Debtors System followed in Branch Accounting. Under this system we need to prepare four control accounts -

1. Hire Purchase Stock Account
2. Hire Purchase Debtors Account
3. Goods Sold on hire Purchase Account
4. Goods Repossessed Account

After preparing the above control account we need to prepare Hire Purchase Adjustment Account for working out Profit or Loss from Hire Purchase Business. The Hire Purchase Adjustment Account is similar to the Second part of Hire Purchase Trading account that we have prepared under Debtors System, wherein the entries for Loading on opening/ closing stock as well as goods sent on Hire Purchase are recorded. The balancing figure of Hire Purchase Adjustment Account reflects the Profit or Loss on Hire Purchase business.

Illustration 1 :

Gada Electronics started business on 1st April 2023 of selling electronic goods on hire purchase basis. During the year ended 31-03-2024, the following transactions were made.

- **Mr. Iyyer** purchased T.V. Costing Rs. 30,000 at Rs 45,000 payable Rs 15,000 as down payment and balance in 12 equal monthly installments of Rs 2,500 each.
- **Mr. Hansraj** purchased one blender costing Rs 10,000 at Rs 15,000 payable Rs 3,000 as down payment and balance in 12 equal monthly installments of Rs 1,000 each.
- **Mrs. Babita** purchased a refrigerator costing Rs 48,000 at Rs. 60,000 payable Rs 12,000 as down payment and balance in 12 equal monthly installments of Rs 4,000 each.

As on 31-03-2024, Mr. Iyyer could not pay one installment out of seven installments due, Mr. Hansraj could not pay one installment out of five installments due and Mrs. Babita could not pay two installments out of eight installments due.

Calculate the profit or loss on hire purchase transactions.

Solution :

Hire Purchase Trading Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To Goods sold on H.P. (at H.P. price)	1,20,000	By Cash Received	73,000
		By H.P. Stock A/c (Closing Balance)	35,500
		By H.P. Debtors (Closing Balance)	11,500
	1,20,000		**1,20,000**
To Stock Reserve (Loading on closing Hire purchase stock)	10,500	By Goods sold on H.P. (Loading)	32,000
To Net Profit (transferred to Profit & Loss A/c)	21,500		
	32,000		**32,000**

Working Notes :

1) Goods sold on Hire Purchase :

i)	T.V. Purchased by Mr. Iyyer	45,000
ii)	Blender Purchased by Mr. Hansraj	15,000
iii)	Refrigerator purchased by Mrs. Babita	60,000
		1,20,000

2) Cash received :

i)	From Mr. Iyyer [15,000 + (2,500 x 6)]	30,000
ii)	From Mr. Hansraj [3,000 + (1,000 x 4)]	7,000
iii)	From Mrs. Babita [12,000 + (4,000 x 6)]	36,000
		73,000

3) Amount of installments due not paid (H.P. Debtors)

i)	From Mr. Iyyer (2,500 x 1)	2,500
ii)	From Mr. Hansraj (1,000 x 1)	1,000
iii)	From Mrs. Babita (4,000 x 2)	8,000
		11,500

4) Amount of installments which are not due (H.P. Stock)

i)	From Mr. Iyyer (2,500 x 5)	12,500
ii)	From Mr. Hansraj (1,000 x 7)	7,000
iii)	From Mrs. Babita (4,000 x 4)	16,000
		35,500

5) Loading on goods sold on hire purchase

Loading = Hire Purchase Price – Cost Price

Loading = (45,000 + 15,000 + 60,000) – (30,000 + 10,000 + 48,000)

= 1,20,000 – 88,000 **= 32,000**

6) Loading on hire purchase stock

		H.P. Stock	Loading	Rupees
i)	Mr. Iyyer	12,500	$\frac{15,000}{45,000}$ x 12,500	4,167
ii)	Mr. Hansraj	7,000	$\frac{5,000}{15,000}$ x 7,000	2,333
iii)	Mrs. Babita	16,000	$\frac{12,000}{48,000}$ x 16,000	4,000
				10,500

Repossession of Goods and its Accounting Treatment :

When a hire purchase customer commits default in payment of installments, the hire vendor has the right to repossess the goods. In such a case the amount of installments unpaid on such goods are shown at the credit side of Hire Purchase Trading Account.

If the goods are sold immediately on repossession or the market value of the goods is given on the date of repossession, then the difference between market value/ value of goods sold and the unpaid amount shall be treated as profit or loss on repossession. If it is profit, then the amount is credited on the second part of Hire Purchase Trading A/c and if it is a loss, then the amount is shown on debit side.

However, if the market value of the goods is not available or the goods are not immediately sold after being repossessed, then we will have to adjust the loading involved in unpaid installments in respect of such goods because its true value is equal to proportionate cost. Having credited the first part of Hire Purchase Trading A/c with amount of unpaid installments, we must

debit the loading included in the unpaid installments in the second part of the Hire Purchase Trading A/c.

Illustration 2 :

Easy Finance Ltd. sells goods on hire purchase on basis of profit of 50% on cost. The following particulars are given for the year ending 31st March 2024. **Prepare Hire Purchase Trading Account.**

Hire Purchase Stock (opening balance)	1,80,000
Hire Purchase Debtors (opening balance)	1,00,000
Goods sold on hire purchase (at H.P price)	17,40,000
Cash received from Customers	12,00,000
Goods repossessed valued at (installments due 60,000)	30,000
Hire Purchase Stock (closing balance)	6,00,000
Hire Purchase Debtors (closing balance)	1,60,000
Expenses	1,90,000

Solution :

Hire Purchase Trading Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To H.P. Stock (opening Balance)	1,80,000	By cash received	12,00,000
To H.P. Debtors (opening Balance)	1,00,000	By goods repossessed (installments unpaid)	60,000
To Goods sold on hire purchase	17,40,000	By H.P. stock (closing Balance)	6,00,000
		By H.P. debtors (closing balance)	1,60,000
	20,20,000		**20,20,000**
To loss on goods repossessed (diff between unpaid installments And market value)	30,000	By stock reserve (loading on opening H.P. stock)	60,000
To Expenses	1,90,000	By Goods sold on H.P. (loading)	5,80,000
To stock reserve (loading on closing H.P. stock)	2,00,000		
To Profit & Loss A/c (profit)	2,20,000		
	6,40,000		**6,40,000**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	1,80,000 x $\frac{50}{150}$	60,000
ii)	On goods sold on H.P.	17,40,000 x $\frac{50}{150}$	5,80,000
iii)	On closing H.P. stock	6,00,000 x $\frac{50}{150}$	2,00,000

2) Loss on goods repossessed = Amount of unpaid installments – Market Value
= 60,000 – 30,000 = **30,000**

Illustration 3 :

Roshan Ltd. sells goods on H.P. System at cost plus 60%. From the following information prepare hire purchase trading account under debtors system.

Hire Purchase Stock (opening balance)	3,20,000
Goods sold at Hire purchase price	16,00,000
Cash received from customers	11,20,000
Goods received back on default valued at (installments due 40,000)	8,000
Hire purchase Stock (closing balance)	7,20,000
Installments due and unpaid (closing balance)	40,000

Solution : **Hire Purchase Trading Account**

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To hire purchase stock (opening balance)	3,20,000	By cash received	11,20,000
To goods sold at hire purchase	16,00,000	By goods repossessed (Installments unpaid)	40,000
		By hire purchase debtors (closing balance)	40,000
		By hire purchase stock (closing balance)	7,20,000
	19,20,000		**19,20,000**
To stock reserve (loading on closing stock)	2,70,000	By stock reserve (loading on opening stock)	1,20,000
To loss on goods repossessed	32,000	By goods sold on H.P (loading)	6,00,000
To profit & loss A/c (profit)	4,18,000		
	7,20,000		**7,20,000**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	3,20,000 x $\frac{60}{160}$	1,20,000
ii)	On goods sold on H.P.	16,00,000 x $\frac{60}{160}$	6,00,000
iii)	On closing H.P. stock	7,20,000 x $\frac{60}{160}$	2,70,000

2) Loss on goods repossessed = Amount of unpaid installments – Market Value
= 40,000 – 8,000 = **32,000**

Illustration 4:

From the following details of **M/s Relax Sales**, **prepare Hire Purchase Trading Account under Debtors system**. M/s Relax Sales Sells goods on hire purchase at cost plus 40% profit.

Stock with customers at H.P. Price (opening balance)	11,20,000
Goods sold on hire purchase during the year (at H.P. Price)	56,00,000
Cash received during the year	39,20,000
Goods repossessed (installments unpaid Rs.1,40,000) at market value	28,000
Stock with customers at H.P. Price (closing balance)	25,20,000
Installments due but not received (closing balance)	1,40,000

Solution : **Hire Purchase Trading Account**

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To hire purchase stock (opening balance)	11,20,000	By cash received	39,20,000
To goods sold at hire purchase	56,00,000	By goods repossessed (Installments unpaid)	1,40,000
		By hire purchase debtors (closing balance)	1,40,000
		By hire purchase stock (closing balance)	25,20,000
	67,20,000		**67,20,000**
To stock reserve (loading on closing stock)	7,20,000	By stock reserve (loading on opening stock)	3,20,000
To loss on goods repossessed	1,12,000	By goods sold on H.P (loading)	16,00,000
To profit & loss A/c (profit)	10,88,000		
	19,20,000		**19,20,000**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	11,20,000 x $\frac{40}{140}$	3,20,000
ii)	On goods sold on H.P.	56,00,000 x $\frac{40}{140}$	16,00,000
iii)	On closing H.P. stock	25,20,000 x $\frac{40}{140}$	7,20,000

2) Loss on goods repossessed = Amount of unpaid installments – Market Value

= 1,40,000 – 28,000 = **1,12,000**

Calculation of Missing Figures :

Many times it may happen that some figures required for calculation of profit/loss on sale of goods of small value on hire purchase are missing. These figures may relate to H.P Stock, Installments due, cash received etc. hence, it becomes necessary to first calculate these figures and then prepare Hire Purchase Trading Account.

If there is only one figure missing, then it can be ascertained easily by preparing the first part of Hire Purchase Trading Account. However, if there are multiple figures missing, then the following steps should be taken to calculate the missing figures.

1. Prepare following memorandum accounts.
   - Memorandum stock at shop account.
   - Memorandum hire purchase stock account (stock out with customers account).
   - Memorandum hire purchase debtors account (installments due account).
2. Fill all the figures given in the problem
3. Start with the account that has most figures, this way it will be easier to find out missing figures of that particular account.
4. Transfer the figure calculated above to relevant account.
5. While the hire purchase stock and hire purchase debtors show the figures at hire purchase price, stock at shop account shows all the figures at cost price. Therefore while transferring the figures from stock at shop to other accounts, the figures should be adjusted hire purchase price and when transferring figures from other accounts to stock at shop account, the figures should be brought down to cost.
6. The process of transfer should continue till all the amounts are filled in above accounts.

The proforma of these accounts are given below.

Memorandum Stock at Shop Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To Balance b/d To Purchases		By goods sold on H.P. (at cost) By Balance c/f	

Memorandum Hire Purchase Stock Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To Balance b/d To Goods sold on Hire Purchase (at H.P. Price)		By installments due By goods repossessed (installments not yet due) By Balance c/f	

Memorandum Hire Purchase Debtors Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To Balance b/d To Stock with customer A/c (total installments fallen due)		By cash received from customers By goods repossessed (installments due but not paid) By balance c/f	

Let us now solve a illustration to get a better understanding on solving problems on missing figures.

Illustration 5 :

Instant Sales Ltd, sells goods on Hire Purchase System at cost plus 25%. **From the following particulars, prepare Hire Purchase Trading Account.**

Stock out on hire purchase (at H.P Price) as on 1st April 2023	80,000
Stock out on hire purchase (at H.P Price) as on 31st March 2024	1,40,000
Goods sent on Hire Purchase (at H.P. Price)	5,20,000
Cash received from customers	4,40,000
Goods repossessed from customer (installments due Rs 12,000) valued at	3,600

Solution :

Hire Purchase Trading Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To hire purchase stock (opening balance)	80,000	By cash received	4,40,000
To goods sold at hire purchase	5,20,000	By goods repossessed (Installments unpaid)	12,000
		By hire purchase debtors (Balancing figure)	8,000
		By hire purchase stock (closing balance)	1,40,000
	6,00,000		**6,00,000**
To stock reserve (loading on closing stock)	28,000	By stock reserve (loading on opening stock)	16,000
To loss on goods repossessed	8,400	By goods sold on H.P. (loading)	1,04,000
To profit & loss A/c (profit)	83,600		
	1,20,000		**1,20,000**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	80,000 x $\frac{25}{125}$	16,000
ii)	On goods sold on H.P.	5,20,000 x $\frac{25}{125}$	1,04,000
iii)	On closing H.P. stock	1,40,000 x $\frac{25}{125}$	28,000

2) Loss on goods repossessed = Amount of unpaid installments – Market Value

= 12,000 – 3,600 = **8,400**

Illustration 6 :

Eureka Appliances sells goods on hire purchase basis at a profit of 25% on hire purchase price. Following are the transactions for the year ended 31st March 2024.

	Particulars	Amount
1st April	Stock out on hire at cost	90,000
	Stock on hand (at shop)	15,000
	Installments due	9,000
	Cash received	2,40,000

31st March	Stock out on hire (at cost)	1,03,500
	Stock on hand (at shop)	21,000
	Installment due	15,000

Calculate the amount of profit or loss on hire purchase under Debtors method.

Solution :

Hire Purchase Trading Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To H.P. Stock A/c (opening Balance)	1,20,000	By cash received	2,40,000
To. H.P. Debtors A/c (opening balance)	9,000	By H.P. Stock A/c (closing Balance)	1,38,000
To Goods Sold on H.P.	2,64,000	By H.P. Debtors (closing Balance)	15,000
	3,93,000		**3,93,000**
To Stock Reserve (loading on closing balance)	34,500	By stock reserve (loading on opening balance)	30,000
To Profit & Loss A/c	61,500	By Goods Sold on H.P. (loading)	66,000
	96,000		**96,000**

Working Note :

Memorandum Stock at Shop Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To Balance b/d	15,000	By goods sold on H.P. (at cost)	1,98,000
To Purchases (Balancing Fig.)	2,04,000	By Balance c/f	21,000
	2,19,000		**2,19,000**

Memorandum Hire Purchase Stock Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To Balance b/d	1,20,000	By installments due	2,46,000
To Goods sold on Hire Purchase (at H.P. Price) (missing fig)	2,64,000	By Balance c/f	1,38,000
	3,84,000		**3,84,000**

Memorandum Hire Purchase Debtors Account

Dr. **Cr.**

Particulars	Amount	Particulars	Amount
To Balance b/d	9,000	By cash received from customers	2,40,000
To Stock with customer A/c (total installments fallen due) (missing fig.)	2,46,000	By balance c/f	15,000
	2,55,000		**2,55,000**

Stock & Debtors System :

Illustration 7 :

Prepare necessary accounts in the books of **M/s Sell-Fast Enterprises** who sell goods at a profit of 25% on cost with the help of following information**. Use stock & Debtors Method and ascertain the profit/ loss from hire purchase business.**

Particulars	Amount
Stock in Shop	
On 1st April 2023	2,25,000
On 31st March 2024	1,87,500
Goods with customers on hire purchase on 1st April 2023	2,70,000
Purchases for Shop Stock	4,84,500
Goods sold on Hire purchase during the year	6,52,500
Installments received	4,50,000
Overdue Installments	
On 1st April 2023	15,000
On 31st March 2024	22,500

Solution :

Hire Purchase Stock Account

Particulars	Amount	Particulars	Amount
To Balance B/d	2,70,000	By Hire Purchase Debtors A/c	4,57,500
To goods sold on Hire Purchase	6,52,500	By Balance C/f	4,65,000
	9,22,500		**9,22,500**

Hire Purchase Debtors Account

Particulars	Amount	Particulars	Amount
To Balance b/d	15,000	By Bank A/c	4,50,000
To H.P. Stock A/c	4,57,500		
(installments due)		By Balance c/f	22,500
	4,72,500		**4,72,500**

Goods Sold on Hire Purchase Account

Particulars	Amount	Particulars	Amount
To Stock at Shop (W.N.1)	5,22,000	By Hire Purchase Stock A/c	6,52,500
To Hire Purchase Adjustment A/c	1,30,500		
	6,52,500		**6,52,500**

Hire Purchase Adjustment Account

Particulars	Amount	Particulars	Amount
To stock Reserve	93,000	By Stock Reserve	54,000
(loading on closing stock)		(loading on opening stock)	
To Profit & Loss A/c	91,500	By Goods sold on H.P. A/c	1,30,500
		(loading)	
	1,84,500		**1,84,500**

Working Notes :

1) Stock At Shop = Opening Balance + purchases made during the Year – Closing Balance

= 2,25,000 + 4,84,500 – 1,87,500

= 5,22,000

2) Calculation of loading

		Loading	Rupees
i)	On opening H.P. stock	2,70,000 x $\frac{25}{125}$	54,000
ii)	On goods sold on H.P.	6,52,500 x $\frac{25}{125}$	1,30,500
iii)	On closing H.P. stock	4,65,000 x $\frac{25}{125}$	93,000

Illustration 8 :

Dhoni Electronics sells goods on hire purchase on basis of profit of 50% on cost. The following particulars are given for the year ending 31st March 2024. **Prepare Hire Purchase Trading Account on stock and debtors system.**

Hire Purchase Stock (opening balance)	2,70,000
Hire Purchase Debtors (opening balance)	1,50,000
Goods sold on hire purchase (at H.P price)	26,10,000
Cash received from Customers	18,00,000
Goods repossessed valued at (installments due 90,000)	45,000
Hire Purchase Stock (closing balance)	9,00,000
Hire Purchase Debtors (closing balance)	2,40,000
Expenses	2,85,000

Solution :

Hire Purchase Stock Account

Particulars	Amount	Particulars	Amount
To balance b/d	2,70,000	By hire purchase debtors A/c	19,80,000
To Goods sold on hire purchase	26,10,000	By balance c/f	9,00,000
	28,80,000		**28,80,000**

Hire Purchase Debtors Account

Particulars	Amount	Particulars	Amount
To balance b/d	1,50,000	By cash A/c	18,00,000
To hire purchase stock A/c	19,80,000	By goods repossessed	90,000
		By balance c/f	2,40,000
	21,30,000		**21,30,000**

Goods Repossessed Account

Particulars	Amount	Particulars	Amount
To Hire purchase debtors A/c	90,000	By Hire purchase adjustment A/c (difference between installments Unpaid and market value)	45,000
		By balance c/f	45,000
	90,000		**90,000**

Hire Purchase Adjustment Account

Particulars	Amount	Particulars	Amount
To stock reserve	3,00,000	By stock reserve	90,000
(loading on closing stock)		(loading on opening stock)	
To goods repossessed A/c	45,000	By goods sold on hire purchase	8,70,000
To Expenses	2,85,000	(loading)	
To profit & loss A/c	3,30,000		
	9,60,000		**9,60,000**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	2,70,000 x $\frac{50}{150}$	90,000
ii)	On goods sold on H.P.	26,10,000 x $\frac{50}{150}$	8,70,000
iii)	On closing H.P. stock	9,00,000 x $\frac{50}{150}$	3,00,000

Illustration 9 :

M/s Classic Sales sells goods on hire purchase basis. They fix the hire purchase price by adding 50% to the cost of goods purchased. Following are the figures relating to hire purchase business for the year 2023-24.

Hire purchase stock account balance as on 1-4-2023	8,40,000
Hire purchase debtors account balance as on 1-4-2023	21,000
Goods sold on hire purchase during the year	63,42,000
Cash received from debtors during the year	64,68,000
Installments falling due during the year	64,89,000

One customer to whom goods had been sold for Rs. 84,000 paid only 5 installments of Rs 7,000 each. On his failure to pay installment of Rs. 7,000 due on 4th March 2024, the goods were repossessed on 27th March 2024 after due legal notice. The goods so repossessed were valued at Rs 40,000.

Prepare the necessary ledger accounts on stock and Debtors system as on 31st march 2024.

Solution :

In Books of M/s Classic Sales

Hire Purchase Stock Account

Particulars	Amount	Particulars	Amount
To balance b/d	8,40,000	By hire purchase debtors A/c	65,31,000
To Goods sold on hire purchase	63,42,000	By balance c/f	6,51,000
	71,82,000		**71,82,000**

Hire Purchase Debtors Account

Particulars	Amount	Particulars	Amount
To balance b/d	21,000	By cash A/c	64,68,000
To hire purchase stock A/c	65,31,000	By goods repossessed (Including one installment due but not received)	49,000
		By balance c/f	35,000
	65,52,000		**65,52,000**

Goods sold on hire purchase A/c

Particulars	Amount	Particulars	Amount
To hire purchase adjustment A/c (loading)	21,14,000	By hire purchase stock A/c	63,42,000
To Trading A/c (transfer)	42,28,000		
	63,42,000		**63,42,000**

Goods Repossessed Account

Particulars	Amount	Particulars	Amount
To Hire purchase debtors A/c	49,000	By Hire purchase adjustment A/c (difference between installments Unpaid and market value)	9,000
		By balance c/f	40,000
	49,000		**49,000**

Hire Purchase Adjustment Account

Particulars	Amount	Particulars	Amount
To stock reserve (loading on closing stock)	2,17,000	By stock reserve (loading on opening stock)	2,80,000
To goods repossessed A/c	9,000	By goods sold on hire purchase (loading)	21,14,000
To profit & loss A/c	21,68,000		
	23,94,000		**23,94,000**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	8,40,000 x $\frac{50}{150}$	2,80,000
ii)	On goods sold on H.P.	63,42,000 x $\frac{50}{150}$	21,14,000
iii)	On closing H.P. stock	6,51,000 x $\frac{50}{150}$	2,17,000

Illustration 10 :

Farhan sells goods on hire purchase at cost plus 60%. From the following particulars prepare Hire Purchase Stock A/c, Hire Purchase Debtors A/c, Stock at Shop A/c and Hire Purchase Adjustment A/c to calculate profit earned for the year ended 31st March 2024.

1st April 2023	
Stock with Hire Purchase Customers at selling price	24,000
Stock at shop at cost	10,000
Installments overdue	16,000
31st March 2024	
Total installments that fell due during the year	3,78,880
Cash received from customers including down payments of Rs 30,880	3,50,880
Goods repossessed (installments due Rs 1,000)	800
Stock at shop at cost (including goods repossessed Rs 800)	4,000
Purchases	2,40,000
Hire Expenses	6,800

Solution :

In Books of Farhan

Stock at Shop A/c

Particulars	Amount	Particulars	Amount
To Balance B/d	10,000	By H.P. Stock A/c	2,46,800
To Purchases	2,40,000	(bal. fig) (at cost)	
		By Balance c/f	3,200
	2,50,000		**2,50,000**

Hire Purchase Stock Account

Particulars	Amount	Particulars	Amount
To Balance B/d	24,000	By H.P Debtors A/c	3,78,880
To Stock at Shop A/c	3,94,880		
(2,46,800 + 60%)		By Balance c/f	40,000
	4,18,880		**4,18,880**

Hire Purchase Debtors Account

Particulars	Amount	Particulars	Amount
To Balance B/d	16,000	By Cash A/c	3,50,880
To H.P. Stock A/c	3,78,880	By Goods repossessed	1,000
		By Balance c/f	43,000
	3,94,880		**3,94,880**

Goods Repossessed Account

Particulars	Amount	Particulars	Amount
To H.P. Debtors A/c	1,000	By Hire purchase Adjustment A/c	200
		By Balance C/f	800
	1,000		**1,000**

Hire Purchase Adjustment Account

Particulars	Amount	Particulars	Amount
To Expenses	6,800	By stock reserve	9,000
To stock reserve	15,000	(loading on opening stock)	
(loading on closing stock)		By goods sold on hire purchase	1,48,080
To goods repossessed A/c	200	(loading)	
To profit & loss A/c	1,35,080		
	1,57,080		**1,57,080**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	24,000 x $\frac{60}{160}$	9,000
ii)	On goods sold on H.P.	3,94,880 x $\frac{60}{160}$	1,48,080
iii)	On closing H.P. stock	40,000 x $\frac{60}{160}$	15,000

Illustration 11 :

Sellaway Ltd. sells its products on hire purchase basis. It charges profit at 25% on selling price. The following particulars pertain to hire purchase business during the year ended 31st March 2024.

Stock at shop (opening balance)	4,50,000
Stock out on hire at hire purchase price (opening balance)	12,00,000
Installments due customers still paying (opening balance)	90,000
Cash received from customers during the year	48,00,000
Stock out on hire at hire purchase price (closing balance)	18,60,000
Installments due customers still paying (closing balance)	1,30,000
Stock at shop (closing balance)	5,16,000

You are required to prepare :

i. Hire Purchase Stock Account.
ii. Hire Purchase Debtors Account.
iii. Goods sold on Hire Purchase Account.
iv. Stock at Shop Account.
v. Hire Purchase Adjustment Account.

Solution :

In Books of Sellaway Ltd.

Hire Purchase Stock Account

Particulars	Amount	Particulars	Amount
To balance b/d	12,00,000	By H.P Debtors A/c	48,40,000
To Goods Sold on H.P. A/c	55,00,000	(installments due)	
		By balance c/d	18,60,000
	67,00,000		**67,00,000**

Hire Purchase Debtors Account

Particulars	Amount	Particulars	Amount
To balance b/d	90,000	By cash	48,00,000
To H.P. Stock A/c	48,40,000		
(installments falling due)		By balance c/d	1,30,000
	49,30,000		**49,30,000**

Goods sold on hire purchase A/c

Particulars	Amount	Particulars	Amount
To H.P Adjustment A/c	11,00,000	By H.P. Stock A/c	55,00,000
To Stock at Shop A/c	44,00,000		
	55,00,000		**55,00,000**

Stock at Shop A/c

Particulars	Amount	Particulars	Amount
To balance b/d	4,50,000	By goods sold on hire purchase	44,00,000
To purchases (bal. figure)	44,66,000	By balance c/d	5,16,000
	49,16,000		**49,16,000**

Hire Purchase Adjustment Account

Particulars	Amount	Particulars	Amount
To Stock reserve	3,72,000	By stock reserve A/c	2,40,000
(loading on closing stock)		(loading on opening stock)	
To Profit & Loss A/c	9,68,000	By goods sold on H.P (loading)	11,00,000
(profit transferred)			
	13,40,000		**13,40,000**

Working Notes :

1) Calculation of loading :

		Loading	Rupees
i)	On opening H.P. stock	12,00,000 x $\frac{25}{125}$	2,40,000
ii)	On goods sold on H.P.	55,00,000 x $\frac{25}{125}$	11,00,000
iii)	On closing H.P. stock	18,60,000 x $\frac{25}{125}$	3,72,000

Illustration 12 :

Luxury Home Appliances commenced business on 1st April 2023. The business is to sell Refrigerators and ovens on both cash and hire purchase basis. Following information is given below.

Particulars	Ovens	Refrigerators
Cash price	10,000	30,000
Cost	8,000	24,000
Cash Down for hire purchase	2,000	6,000
Monthly installments	1,000	3,000
Number of installments	10	12

The company purchased goods costing Rs 1 crore in all and made cash sales of Rs 86 lakh. The stock in hand on 31st march 2024 was valued at Rs 12 lakh. Hire purchase transactions were as follows.

Particulars	Number sold	Installments collected	Installments due customers paying)
Ovens	40	260	15
Refrigerators	20	110	10

3 ovens and 2 refrigerators on which only four installments per piece were collected were repossessed and were valued at a total sum of Rs 32,000. This amount is not included in the stock above. Prepare the necessary accounts showing the profit earned by the company.

Solution : **In Books of Luxury Home Appliances**

Hire Purchase Stock Account

Particulars	Amount	Particulars	Amount
To goods sold on hire purchase	13,20,000	By H.P. Debtors A/c (balancing figure)	9,01,000
		By balance c/d	4,19,000
	13,20,000		**13,20,000**

Hire Purchase Debtors Account

Particulars	Amount	Particulars	Amount
To hire purchase stock A/c	9,01,000	By cash	7,90,000
		By goods repossessed	32,000
		By hire purchase adjustment A/c (loss on repossession)	34,000
		By balance c/f	45,000
	8,35,000		**8,35,000**

Goods sold on hire purchase A/c

Particulars	Amount	Particulars	Amount
To trading A/c (transfer at cost price)	8,00,000	By H.P. stock A/c	13,20,000
To hire purchase adjustment A/c (loading)	5,20,000		
	13,20,000		**13,20,000**

Goods Repossessed Account

Particulars	Amount	Particulars	Amount
To hire purchase debtors A/c	32,000	By balance c/f	32,000
	32,000		**32,000**

Hire Purchase Adjustment Account

Particulars	Amount	Particulars	Amount
To hire purchase debtors A/c	34,000	By goods sold on H.P A/c	5,20,000
To H.P. stock reserve A/c (loading)	1,69,380		
To profit & loss A/c	3,16,620		
	5,20,000		**5,20,000**

Trading A/c

Particulars	Amount	Particulars	Amount
To purchases A/c	1,00,00,000	By sales	86,00,000
		By goods sold on H.P A/c	8,00,000
To gross profit	6,00,000	By Closing Stock	12,00,000
	1,06,00,000		**1,06,00,000**

Profit & loss A/c

Particulars	Amount	Particulars	Amount
To net profiit	9,16,620	By gross profit	6,00,000
		By hire purchase adjustment a/c	3,16,620
	9,16,620		**9,16,620**

Working Note :

1) Total sales on H.P. basis :

Particulars	Ovens	Refrigerators
Ovens (40 x 12,000)	4,80,000	3,20,000
Refrigerators (20 x 42,000)	8,40,000	4,80,000
Total	**13,20,000**	**8,00,000**

2) Cash collected :

Particulars	Ovens	Refrigerators
Cash down	80,000	1,20,000
Installments collected	2,60,000	3,30,000
Total	**3,40,000**	**4,50,000**

3) Installments not yet due :

Ovens	
Total installments on 37 ovens (37 x 10)	370
Less installments collected and due (275 – 12) (12 = 4 instalments of 3 ovens repossessed)	263
Installments not yet due	107
Amount of installments not yet due (1,000 x 107)	**1,07,000**
Refrigerators	
Total installments on 18 refrigerators (18 x 12)	216
Less installments collected and due (120 – 8) (8 = 4 instalments of 2 refrigerators repossessed)	112
Installments not yet due	104
Amount of installments not yet due (3,000 x 104)	**3,12,000**

Total amount on Installments not yet due = 1,07,000 + 3,12,000 = 4,19,000

4) Hire Purchase Stock Reserve :

	Ovens	Refrigerators
Total amount due	12,000	42,000
(H.P. price per unit)		
Cost price	8,000	24,000
Difference	4,000	18,000
Reserve required		
4,000/12,000 x 1,07,000	**35,666**	
18,000/42,000 x 3,12,000		**133714**

Total of H.P Stock reserve = 35,666 + 1,33,714 = 1,69,380

5) Loss on repossession :

Hire purchase price of 3 ovens (3 x 12,000)	36,000
Hire purchase price of 2 refrigerators (2 x 42,000)	84,000
Total	**1,20,000**
Less	
cash received	
For ovens 3(2,000 + 4 x 1,000)	(18,000)
For refrigerators 2(6,000 + 4 x 3,000)	(36,000)
Estimated value of repossessed goods	(32,000)
Loss on repossession	**34,000**

:: EXERCISES ::

Write Short notes on :

1. Installment Sale.
2. Stock at Shop.
3. Cost of Goods Sold on Hire Purchase
4. Hire Purchase Debtors.
5. Accounting treatment on repossession of goods.

Answer the Following :

1. Explain the meaning and features of Hire Purchase System.
2. What is the difference between Hire Purchase System and Installment System?
3. Explain how profit is calculated in Hire Purchase business using Debtors Method.
4. Explain how profit is calculated in Hire Purchase business using Stock & Debtors Method.

Unsolved Problems :

1) **Imperial Trading Co.** a hire vendor, furnished the following information for the year ended 31st March 2024. The vendor sold goods on Hire Purchase at cost plus 60%.

Goods with Hire Purchase customers (at H.P. price) on 01-04-2023	3,20,000
Goods sold on Hire Purchase during the year (at H.P. price)	16,00,000
Cash received during the year	11,20,000
Goods repossessed (installments unpaid 40,000) at market value	6,000
Goods with Hire Purchase customers (at H.P. price) on 31-03-2024	7,20,000

Prepare hire purchase trading account in the books of Imperial Trading Co.

2) From the following transactions of **Levis Ltd.**, a hire vendor, prepare the necessary accounts under Debtors Method in its books for the year ended 31-03-2024. The goods are sold at cost plus 40%

Stock in shop as on 01-04-2023	2,00,000
Installments due as on 01-04-2023	1,20,000
Stock with customers at Hire Purchase Price as on 01-04-2023	16,00,000
Cash received during the year	32,00,000
Expenses on hire purchase business	3,00,000
Purchases	27,20,000
Stock in shop as on 31-03-2024	2,80,000
Installments due as on 31-03-2024	2,00,000
Stock with customers at Hire Purchase Price as on 31-03-2024	18,40,000

3) **Plasma Appliances** sells goods on hire purchase basis at a profit of 25% on hire purchase price. Following are the transactions for the year ended 31st March 2024.

Date	Particulars	Amount
1st April	Stock out on hire at cost	1,35,000
	Stock on hand (at shop)	22,500
	Installments due	13,500
	Cash received	3,60,000
31st March	Stock out on hire (at cost)	1,55,250
	Stock on hand (at shop)	31,500
	Installment due	22,500

Calculate the amount of profit or loss on hire purchase under Debtors method. (Missing figures)

4) **Perfect Sales Co.** a hire vendor engaged in the business of hire purchase. The following information is provided for the year ended 31-03-2024 in respect of their business.

Stock with customers at Hire Purchase Price as on 01-04-2023	45,000
Installments due as on 01-04-2023	25,000
Cash received from customers	3,00,000
Goods repossessed (installments due 10,000) at market value	6,500
Installments due	45,000
Goods sold on Hire Purchase	4,35,000

Prepare necessary accounts under Stock and Debtors system assuming Hire Purchase Price at cost plus 50%.

5) Following information was available for the year ended 31st March 2024, in respect of **M/s Utkarsha Auto Dealers** who are engaged in Hire Purchase Business of two wheelers. Calculate the amount of profit under Stock and Debtors Method.

Installments due as on 01-04-2023	4,00,000
Stock at Shop as on 01-04-2023	12,00,000
Stock out with customers (at H.P. Price) as on 01-04-2023	25,00,000
Cash received during the year	2,00,00,000
Purchases	1,67,00,000
Goods repossessed (installments due 3,00,000) valued at	50,000
Installments due as on 31-03-2024	6,00,000
Stock at Shop as on 31-03-2024	11,00,000
Stock out with customers (at H.P. Price) as on 31-03-2024	30,00,000

The goods were sold on Hire Purchase at a cost plus 20%.

6) **Easy Sales Co.** sells goods on hire purchase. The hire purchase price is fixed by adding 50% to the cost the following are the figures relating to hire purchase business for the year 2023-24.

Hire Purchase Stock as on 1-4-2023	36,000
Hire Purchase Debtors as on 1-4-2023	900
Goods sold on Hire Purchase	2,71,800
Cash received during the year	2,77,200
Total amount of installments due during the year	2,78,100

A customer to whom goods were sold for Rs 3,600 paid three installments of Rs. 300 each, his fourth installment was due on March 2024 which he failed to pay. Consequently, the goods were repossessed after giving due notice to the customer. **Prepare necessary accounts under Stock & Debtors System for the year ending 31st March 2024.**

7) **Raju sells** goods on hire purchase at cost plus 30%. From the following particulars prepare Hire Purchase Stock A/c, Hire Purchase Debtors A/c, Stock at Shop A/c and Hire Purchase Adjustment A/c to calculate profit earned for the year ended 31st March 2024.

1st April 2023	
Stock with Hire Purchase Customers at selling price	12,000
Stock at shop at cost	5,000
Installments overdue	8,000
31st March 2024	
Total installments that fell due during the year	1,89,440
Cash received from customers including down payments of Rs 15,440	1,75,440
Goods repossessed (installments due Rs 500)	400
Stock at shop at cost (including goods repossessed Rs 400)	2,000
Purchases	1,20,000
Hire Expenses	3,400

*****

CHAPTER 3

Accounting for Construction Contract

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3.1 Introduction –

Accounting Treatment - Percentage of completion method - completed contract method - Provisions for unforeseeable factors - Principles to be followed while taking credit for profit on incomplete Contracts :

Contract costing is a variant of job costing. It is also known as terminal costing. Contract means a big job in which work is done at site and not in factory premises. The cost of each contract is ascertained separately. Thus, in this method of costing, each contract is a separate cost unit and an account is opened for each contract in the books of contractor to ascertain profit/loss on individual contracts.

Features of Contract Costing:

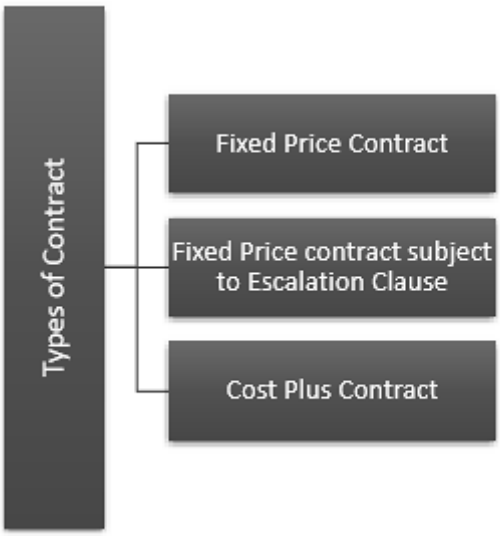
Contract costing usually shows the following features:

- Contracts are generally of large size and, therefore, a contractor usually carries out a small number of contracts at a particular point of time.
- A contract generally takes more than one year to complete,
- Work on contracts is carried out at the site of contracts and not in factory premises.
- Each contract undertaken is treated as a cost unit.

- A separate contract account is prepared for each contract in the books of contractor to ascertain profit or loss on each contract.
- Nearly all labour cost will be direct.
- Most expenses (e.g., electricity, telephone, insurance, etc.) are also direct.
- Specialist subcontractors may be employed for electrical fittings, welding work, glass work, etc.
- Plant and equipment may be purchased for the contract or may be hired for the duration of the contract.

Types of Contracts:

There are three types of contracts, as depicted in the following image:



1. **Fixed Price Contracts:** Under these types of contracts, a fixed price of contract is agreed upon between contractor and contractee. The agreed price is paid by the contractee to the contractor. Deductions are made for defectives and penalty for delay is also payable by contractor. Extra payment is made by the contractee for some extra work carried on in addition to the work agreed originally under the contract.
2. **Contracts with Escalation Clause:** In these cases, the contract price is fixed with provision that it will be increased with increase in price of materials, wage rates and other major costs, and reduced with decline in the costs. This escalation is implemented according to mutually pre-determined formula.
3. **Cost plus Contracts:** this method is adopted where probable cost of the contract cannot be ascertained in advance with reasonable accuracy at the time of entering into contract. In case of these contracts, no fixed price is determined for the contract. Contractee

compensates the contractor for all allowable costs actually incurred by him. A contractor is paid a fixed percentage of cost as profit over and above the cost incurred by him. Sometimes a contractor is also paid a lumpsum amount as fee in place of profit.

Distinction between Contract Costing and Job Costing:

Main points of distinction between contract costing and job costing are as follows:

- Contract is generally big while job is small. It is well said, "a job is a small contract and a contract is a big job."
- The number of jobs undertaken at a time are usually large as compared to number of contracts because contracts are generally much bigger in size.
- In contract costing most of the costs are chargeable direct to contract accounts. Under job costing, direct allocation to such an extent is not possible.
- Allocation and apportionment of overhead costs is simpler in contract costing as compared to job costing.
- Jobs are usually carried out in factory premises while contract work is done at site.

Accounting Procedure for Construction Contracts

The basic procedure for Accounting of construction contracts is as follows:

1. **Contract account:** Each contract is allotted a distinct number and a separate account is opened for each contract.
2. **Direct costs:** Most of the costs of a contract can be allocated direct to the contract. All such direct costs are debited to the contract account. Direct costs for contracts include: i) Materials, (ii) Labour and supervision, (iii) Direct expenses, (iv) Depreciation of plant and machinery, (v) Subcontract costs, etc.
3. **Indirect costs:** Contract account is also debited with overheads which tend to be small in relation to direct costs. Such costs are often absorbed on some arbitrary basis as a percentage on prime cost, or materials, or wages, etc. Overheads are normally restricted to head office and storage costs.
4. **Transfer of materials or plant:** When materials, plant or other items are transferred from the contract, the contract account is credited by that amount.
5. **Contract price:** The contract account is also credited with the contract price. However, when a contract is not complete at the end of the financial year, the contract account is credited with the value of work-in-progress as on that date.
6. **Profit or loss on contract.** The balance of contract account represents profit or loss which is transferred to Profit and Loss Account. However, when contract is not completed within the financial year, only a part of the profit arrived is taken into account

and the remaining profit is kept as reserve to meet any contingent loss on the incomplete portion of the contract.

Special Points to be considered in Contract Costing:

- **Cost of Materials:** Materials include (*i*) materials specifically purchased for the contract; (*ii*) materials issued from store against material requisition notes. The cost of both these types of materials is debited to the contract account.
- **Materials returned to store.** Whenever materials are issued in excess of requirements, as for instance, cement, sand, pipes, bricks, etc., these are later returned to the store accompanied by a Material Return Note which gives the details of the material returned. Such returned materials are credited to contract account.
- **Materials at site.** At the end of each accounting period, value of materials lying unused at site is credited to contract account and is carried forward for charging against the next period.
- **Cost of Labour:** All wages of workers engaged on a particular contract are charged direct to the contract irrespective of the type of work they perform. When several contracts are running at different locations, payroll is normally sectionalised so as to have separate payroll for each contract.

  Difficulties in costing may be encountered when some workers may have to move from one site to another when a number of small contracts are undertaken. In such situation, it becomes necessary to provide time sheets from which allocations can be made. In order to control labour utilisation and prevent fraud in the payment of wages, surprise visits by head office personnel will be necessary.
- **Plant Depreciation:** There are two different methods of dealing with depreciation of plant in contract account:

a) Contract account is debited with the cost of the plant installed. At the end of the year or when the plant is no longer required, the plant is revalued and contract account is credited with this revalued or depreciated figure. In case plant is sold on the completion of the contract, the contract account is credited with its sale proceeds. The net effect of the above debit and credit will be that the contract account will stand debited with the amount of depreciation which is the difference between the value of plant debited and value of plant credited. The method is generally used on long contracts which extend over more than one year because depreciated value of the plant is credited to the contract account and brought down as an opening balance in the next period.

b) Alternatively, contract account is simply debited with the amount of depreciation. It is usual to use this method when plant is sent to contract only for a short period. For example, mobile crane or bulldozer used in a contract may be charged on this basis.

However, when a plant is hired for a contract, a charge for the hire of the plant is debited to the contract as a direct expense.

All the outgoing plant and machineries shall be credited with the WDV i.e. cost less depreciation. If the rate of depreciation is given per annum, then depreciation shall be calculated on the basis of time but if per annum is not mentioned with the rate then depreciation shall be calculated for whole of the year ignoring the time factor even though the plant was used for less than a year.

Subcontract Costs:

Work of specialised character, for which facilities are not internally available, is offered to a subcontractor. For example, steel work, glass work, painting, etc., is usually carried out by the subcontractors who are accountable to the main contractor. The cost of such work is charged to the contract account.

Payment based on Architect's Certificate:

In case the contract is small, full payment is usually made on the completion of the contract. But in case of large contracts, it may take more than one year to complete. In such a case, if no payment is received until the completion of the contract, the financial resources of the contractor could surely become strained. Therefore, a system of progress payments is agreed by parties. In this system, part payments of the contract amount are paid from time to time on the basis of certificate issued by the architects (acting for the contractee), certifying the value of the work satisfactorily completed. Such payments received by the contractor are usually credited to the personal account of the contractee. It should be noted that such payments are not entered in the Contract Account.

Work-in-progress — Work Certified and Uncertified:

When the contract is not completed till the end of the accounting year, the architect is required to value the work-in-progress. Such work-in-progress is classified into work certified and work uncertified.

Work Certified. This is that part of the work-in-progress which has been approved by the contractee's architect or engineer for payment. Work certified is valued at contract price (*i.e*, selling price), and includes an element of profit.

Work Uncertified. This is that part of the work-in-progress which is not approved by the architect or engineer. This is valued at cost and thus does not include an element of profit. Both work certified and uncertified appear on the credit side of the contract account and also on the assets side of the balance sheet.

Retention Money and Cash Ratio:

It is usual practice not to pay the full amount of work certified. The contractee may pay a fixed percentage, say 80% or 90% of the work certified, depending upon the terms of the contract. This is known as *Cash Ratio*. The balance amount not paid is known as *Retention Money*. For example,

if cash ratio is 75%, the retention money will be remaining 25%. This retention money is a type of security for any defective work which may be found in the contract later on. This also works as a deterrent for the contractor to leave the contract incomplete, if he finds the contract unprofitable. The retention money may also be adjusted against penalties that become due if the contract is not completed within the stipulated time as per the terms of the agreement.

Extra Work:

Sometimes the contractor is required to do some extra work like additions or alterations in the work originally done as per agreement. The contractor will charge extra money for such extra work. The cost of such extra work is debited to the contract account and extra price realised is credited to the contract account.

Calculation of Profit on Incomplete Contracts:

Contracts which are started and finished during the same financial year create no accounting problems. But in case of those contracts which take more than one year to complete, a problem arises whether profit on such contracts should be worked out only on the completion of the contract or at the end of each financial year on the partly completed work. If profit is computed only on the completion of the contract, profit will be high in the year of completion of the contract, whereas in other years of working on contract, profit will be nil. This would result not only in distorted profit pattern but also higher tax liability because income tax at higher rates may have to be paid. Therefore, when contracts extend beyond a year, it becomes necessary to take into account the profit earned (or loss incurred) on the work performed during each year. This helps in avoiding distortion of the year-to-year profit trend of the business. There are two aspects of profit computation:

a) Computation of notional profit or estimated profit.

b) Computation of the portion of such profit to be transferred to Profit and Loss Account.

Notional Profit:

Notional profit is the difference between the value of work-in-progress certified and the cost of such work-in-progress certified. It is computed as follows (Figures are assumed):

Value of work certified	40,00,000
Add: Cost of work not yet certified	3,00,000
	43,00,000
Less: Cost of work to date	38,00,000
Notional Profit	5,00,000

If in any year, cost of work done exceeds the value of work certified and uncertified, the result will be a notional loss.

Estimated Profit:

Estimated profit represents the excess of the contract price over the estimated total cost of the contract. It is computed as follows (Figures are assumed):

Contract Price	15,00,000
Less: Total cost already incurred	10,50,000
Less: Estimated additional costs to complete the contract	1,75,000
Estimated Profit	2,75,000

Portion of Notional Profit or Estimated profit to be transferred to Profit and Loss Account:

The portion of the notional or estimated profit to be transferred to P&L Account depends upon the stage of completion of the contract *i.e.,* ratio of work-in-progress certified to total contract work. For this purpose work-in-progress uncertified is not considered. Prudence requires that the total notional profit should not be transferred to P&L Account but a portion of it should be withheld as a reserve to meet any unforeseen future expenses or contingencies.

Following rules are to be followed while calculating amount to be transferred:

1. When work-in-progress certified is less than 1/4 of the contract price, no profit is transferred to Profit and Loss Account. This is based on the principle that no profit should be taken into account unless the contract has reasonably advanced.
2. When work-in-progress certified is 25% or more but less than 50% of the contract price, then generally 1/3 of the profit is transferred to Profit and Loss Account. The balance amount is treated as reserve. Thus, profit to be transferred to Profit and Loss Account is computed by the following formula:

   $$\text{Amount to be transferred to Profit \& Loss A/c} = \text{Notional Profit} \times \frac{1}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}.$$

3. When work certified is 50% or more but less than 90% of the contract price, (*i.e.,* 50% to 90%), then the profit to be transferred to P & L Account is computed as follows:

   $$\text{Amount to be transferred to Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}.$$

4. When contract is near completion then the estimated profit should be calculated on the whole contract. The proportion of estimated profit to be transferred to Profit and Loss Account is computed by any one of the following formulas:

   $$\text{Estimated Profit} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$\text{Estimated Profit } \frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$\text{Estimated Profit } \times \frac{\text{Cost of Work to Dates}}{\text{Estimated Total Cost of Work}}$$

$$\text{Estimated Profit } \times \frac{\text{Cost of Work to Dates}}{\text{Estimated Total Cost of Work}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

5. **Loss on Uncompleted Contracts:** In the event of a loss on uncompleted contracts, this should be transferred in full to the Profit and Loss Account, whatever be the stage of completion of the contract.

3.2 Escalation clause & Cost Plus Contracts:

Contracts generally take long time to complete and in this period there may be changes in prices. Escalation clause is often provided in contracts to cover any likely changes in the price or utilisation of materials and labour. Thus, a contractor is entitled to suitably enhance the contract price if the cost rises beyond a given percentage. The object of this clause is to safeguard the interest of the contractor against unfavourable changes in cost. The escalation clause is of particular importance where prices of material and labour are anticipated to increase or where quantity of material and/or labour time cannot be accurately estimated.

Just as an escalation clause safeguards the interest of the contractor by upward revision of the contract price, a de-escalation clause may be inserted to look after the interest of the contractee by providing to downward revision of the contract price in the event of cost going down beyond an agreed level.

Cost-Plus Contract:

Cost-plus contract is a contract in which the contract price is ascertained by adding a specified amount or percentage of profit to the costs allowed in the contract. This type of contract terms are agreed upon in those cases where it is not possible to compute the cost in advance with a reasonable degree of accuracy due to unstable conditions of market prices, labour rates, etc. The contractee undertakes to reimburse the actual cost of contract plus a stipulated profit. The profit to be added to cost may be either a fixed amount or a specified percentage of cost. The items of cost to be included for the purpose of determining contract price are broadly agreed upon in advance. The accounts of the contractor are usually subject to audit by the contractee.

Cost-plus contracts are usually entered into for executing special type of work, like construction of dam, powerhouse, newly-designed ship, etc., where cost estimation is difficult. Government often prefers to give contracts on ‘cost-plus’ terms.

Cost-plus contracts offer the following advantages:

To the Contractor:

- There is no risk of loss on such contracts.
- It protects him from the risk of fluctuations in market prices of material, labour, etc.
- It simplifies the work of preparing tenders and quotations.

To the Contractee:

- The contractee can ensure a fair price of the contract by being entitled to audit the accounts
  of the contractor.

The disadvantages of cost-plus contracts are:

To the Contractor:

- The contractor is deprived of the advantages which would have accrued due to favourable market prices.
- The contractor has to suffer for his own efficiency. This is because profit is usually based as a percentage of cost and efficient working resulting in lower cost also leads to lower profits.

To the Contractee:

- The contractee has to pay more for the inefficiency of the contractor as a contractor has no incentive to reduce costs.
- The price a contractee has to pay is unknown until after the completion of work.

3.3 Preparation of Contract Account within the framework of AS-7:

Contract A/c for year ending _____

Particulars	Amount	Particulars	Amount
To material issued from store To material purchased To material transferred from other contracts To material consumed (if given, and in this case all other items related to material shall be ignored) To labour Add: Outstanding labour		By material at site By material returned to store By material transferred to other contracts By profit and loss account: • Material/Plant stolen • Material/Plant lost due to unforeseen reasons *eg.* fire, rain, etc • Loss on sales of material/plant. By plant at site (Cost) Less: Depreciation	

To plant issued To plant purchased To plant transferred from other contracts To sub contract cost To cost of extra work done To site expenses To direct expenses Add: Outstanding expenses To indirect expenses/overheads Add: Outstanding expenses To profit and loss account: (Profit on sales of material/plant) To Contract escalation (Decrease in CP) To profit and loss account (if contract is completed and profit is there) To notional profit c/d (if work certified is more than 25% of the contract price but less than 90% of the contract price)		By plant returned to store (Cost) Less: Depreciation By plant transferred to other contracts (Cost) Less: Depreciation By material/plant sold By work in progress (In case contract is incomplete): Work certified Work not certified By CONTRACTEE ACCOUNT (by the amount of contract price on the completion of contract) By profit and loss account (if there is loss on contract either before completion or after completion) By Contract escalation (Increase in CP) By profit and loss account (if contract is completed at loss)	
TOTAL		**TOTAL**	
To profit and loss account (part of notional profit if the contract is not completed) * To work in progress (transferred to reserve only when the contract is not completed)		By notional profit b/d	
TOTAL		**TOTAL**	

3.4 & 3.5 Reference to the requirements of AS-7 — Construction Contracts (Revised), Reference Ind AS-11 — Construction Contracts:

The Accounting Standard 7 on Construction Contracts (Revised) has already been discussed in detail in Chapter 1 of this book.

Ind AS-11 – Construction Contracts:

According to Ind AS-11 on Construction Contracts, the costs and revenue associated with a contract can be recognized only when the outcome of contract can be estimated reliably. The outcome of fixed price contract can be estimated reliably when:

- Total contract revenue can be measured reliably
- It is probable that the economic benefits associated with the contract will flow to the entity.
- The contract costs to complete the contract and the stage of contract completion at the end of the reporting period can be measured reliably.
- The contract costs attributable to the contract can be clearly identified and measured reliably so that actual contract costs incurred can be compared with prior estimates.

In the case of a cost-plus contract, the outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:

- It is probable that the economic benefits associated with the contract will flow to the entity.
- The contract costs attributable to the contract, whether or not specifically reimbursable, can be clearly identified and measured reliably.

Once the outcome of the contract can be estimated reliably the contract costs and revenue will be recognised as revenue and expenses by reference to the stage of completion of the contracting activity at the end of the reporting period. This method is called the percentage of completion method. The stage of completion can be determined by either of the following:

- The proportion of the contract costs incurred till date to the estimated total contract costs Surveys.
- By the completion of a physical proportion of the contract work.

When the outcome of a construction contract cannot be estimated reliably:

- Revenue shall be recognised only to the extent of contract costs incurred, which are probable and recoverable.
- Contract costs shall be recognised as an expense in the period in which they are incurred.

Another important aspect that the standard covers is the recognition of losses. When it is probable that the total contract costs will exceed the total revenue, then the loss must be expensed out (recorded) immediately.

:: Problems on Contract Accounts ::

Treatment of Materials :

Problem 1:

Raghav took a contract for construction of a shop. Material purchased from market Rs. 1,60,000, material issued from store Rs. 30,000, material transferred to this contract from another contract Rs. 56,000, material costing Rs. 14,000 was stolen from site, material costing Rs. 26,000 returned to store, material lost by fire on site Rs. 2,400, material costing Rs. 2,000 was sold for Rs. 1,600, material costing Rs. 8,000 transferred to another contract and material on site at closing date was Rs. 16,000. **You are required to show these details about material in contract A/c.**

Contract A/c (Shop)

Particulars	Amount	Particulars	Amount
To Material purchased	1,60,000	By Material at site	16,000
To Material issued from store	30,000	By Material transferred to another Contract	8,000
To Material received from another Contract	56,000	By Material returned to store	26,000
		By Material Sold	1,600
		By P & L A/c (loss on material sold) (Rs. 2,000 – Rs. 1,600)	400
		By Material stolen from site	14,000
		By P&L A/c (loss by fire)	2,400

Problem 2:

Material Purchased Rs. 2,00,000; Opening balance of material Rs. 40,000; Material at site Rs.60,000; Material costing Rs. 20,000 was sold for Rs. 24,000; Material costing Rs. 10,000 was sold for Rs. 6,000; Material costing Rs. 8,000 was lost by fire. Show the accounting treatment of material in Contract A/c.

Contract A/c

Particulars	Amount	Particulars	Amount
To Opening balance	40,000	By Material at site	60,000
To Material purchased	2,00,000	By Material sold	24,000
To P&L A/c (profit on material sold Rs.24,000 – Rs.20,000)	4,000	By Material sold	6,000
		To P&L A/c (loss on material sold Rs.10,000 – Rs.6,000)	4,000
		By P&L A/c (loss by fire)	8,000

Treatment of Plant & Machinery:

Problem 3:

Ramesh a building contractor started a work from 1st April 2023. On 1st June 2023 a plant costing Rs. 1,20,000 was purchased for the contract. A part of the plant costing Rs. 20,000 was unsuitable and returned to store on 31st August 2023. Plant costing Rs. 12,000 was stolen from the site at the beginning. Plant costing Rs. 40,000 was sold for Rs. 26,000 on 31st March 2024. Accounts are closed on 31st March every year. Charge depreciation (i) at 10% and (ii) at 10% per annum and show the treatment in the contract account.

Solution:

Case 1: when depreciation is charged at 10%

Contract A/c

Particulars	Amount	Particulars	Amount
To Plant	1,20,000	By plant returned to store (WN 1)	
		Cost 20,000	
		Less depreciation –2,000	18,000
		By P&L A/c (plant stolen)	12,000
		By plant sold	26,000
		By P&L A/c (loss on sale of plant) (WN2)	10,000
		Plant at site (WN 3)	43,200

Working Note:

1. **Calculation of depreciation of plant returned to store (on 31st August 2022):**
   Rs. 20,000 × 10% = Rs. 2,000 (time is ignored as per annum is not given along with rate)

2. **Loss on sale of plant:**

Cost of Plant	40,000
Less Depreciation @ 10% (time is ignored as per annum is not given along with rate)	4,000
Written Down Value	**36,000**
Less sales of plant	26,000
Loss on Sale of plant	**10,000**

3. Calculation of Plant at Site:

Cost of plant	1,20,000
Less Cost of plant returned to store	20,000
Less Cost of plant stolen	12,000
Less Cost of plant sold	40,000
Cost of plant at site	**48,000**
Less Depreciation @ 10%	4,800
Value of plant at site	**43,200**

Case 2: when depreciation is charged at 10% per annum.

Contract A/c

Particulars	Amount	Particulars	Amount
To Plant	1,20,000	By plant returned to store (WN 1)	
		Cost 20,000	
		Less depreciation -500	19,500
		By P&L A/c (plant stolen)	12,000
		By plant sold	26,000
		By P&L A/c (loss on sale of plant) (WN2)	10,667
		Plant at site (WN 3)	44,000

Working Note:

1. Calculation of depreciation of plant returned to store (on 31st August 2022):

Rs. 20,000 x 10% × 3 months / 12 months = Rs. 500

2. Loss on sale of plant:

Cost of Plant	40,000
Less Depreciation @ 10% × 10 months /12 months	3,333
Written Down Value	**36,667**
Less sales of plant	26,000
Loss on Sale of plant	**10,667**

3. Calculation of Plant at Site:

Cost of plant	1,20,000
Less Cost of plant returned to store	20,000
Less Cost of plant stolen	12,000
Less Cost of plant sold	40,000

Cost of plant at site	**48,000**
Less Depreciation @ 10%	4,000
Value of plant at site	**44,000**

Problem 4:

The total contract price of a contract is Rs. 40,00,000. On 31st March 2024, the value of work certified was Rs. 30,00,000 and the total cost incurred was Rs. 22,00,000. The value of work uncertified was Rs. 1,00,000. The cash received was Rs. 20,00,000. **You are required to determine the amount of the profit to be taken to the P & L a/c and to the work in progress account (reserve).**

Solution:

Contract A/c for year ending 31st March 2024

Particulars	Amount	Particulars		Amount
To Cost Incurred	22,00,000	By Work in progress		
		Work certified	30,00,000	
To Notional Profit c/f	9,00,000	Work uncertified	1,00,000	31,00,000
	31,00,000			**31,00,000**
To P & L A/c (WN 1)	4,00,000	By Notional Profit b/d		9,00,000
To Work in progress A/c (bal. fig)	5,00,000			
	9,00,000			**9,00,000**

Working Notes:

1) Percentage of work certified to contract price = 30,00,000 / 40,00,000 x 100 = 75%

As the value of work certified is more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\boxed{\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}}$$

$$= 9,00,000 \times \frac{2}{3} \times \frac{20,00,000}{30,00,000} = \mathbf{4,00,000}$$

Problem 5:

The contract price is Rs. 60,00,000. On 31st March 2024, 90% of the work had been completed and certified by the architects. The costs incurred up to 31st march, 2024 on this project amounted to Rs. 48,00,000. It was estimated that another 2,40,000 would have to be incurred further to

complete the project. The client paid 75% of the value of the work certified. Work not certified is Rs. 3,00,000. **Find out the profit to be taken to profit and loss account.**

Solution:

Contract A/c for year ending 31st March 2024

Particulars	Amount	Particulars		Amount
To Cost incurred	48,00,000	By Work in progress		
		Work certified	54,00,000	
To Notional Profit c/f	9,00,000	Work uncertified	3,00,000	57,00,000
	57,00,000			**57,00,000**
To P & L A/c (WN 1)	6,48,000	By Notional Profit b/d		9,00,000
To Work in progress A/c (bal. fig)	2,52,000			
	9,00,000			**9,00,000**

Working Notes:

1) Since 90% of work has been completed and certified, the contract is near completion. So first estimated profit shall be calculated as follows:

Estimated profit = Contract price – Estimated cost

= 60,00,000 – 48,00,000 + 2,40,000

(cost incurred plus additional cost to be incurred further)

= 60,00,000 – 50,40,000

= 9,60,000

2) Profit to be taken to Profit & Loss A/c = estimated profit $\times = \frac{\text{Cash Received}}{\text{Contract Price}}$

$$= 9{,}60{,}000 \times \frac{40{,}50{,}000}{60{,}00{,}000} = 6{,}48{,}000$$

Problem 6:

Following is the information related to contract

Contract Price	30,00,000
Wages	8,20,000
General Expenses	43,000
Raw Materials	6,00,000
Plant	1,00,000

As on 31st March 2024, cash received was Rs. 12,00,000; being 80% of work certified. The value of materials remaining at the site was Rs. 50,000. Depreciate plant by 10%. Prepare the contract account.

Solution:

Contract A/c for year ending 31st March 2023

Particulars	Amount	Particulars	Amount
To Raw Materials	6,00,000	By Work in progress	
To Wages	8,20,000	Work certified (WN 1) 15,00,000	
To General expenses	43,000	Work uncertified	15,00,000
To depreciation on plant	10,000		
(10% of 1,00,000)		By materials at site	50,000
To Notional Profit	77,000		
	15,50,000		**15,50,000**
To P & L A/c (WN 2)	41,067	By Notional Profit b/d	77,000
To Work in progress A/c (bal. fig)	35,933		
	77,000		**77,000**

Working Notes:

1) Cash received is Rs. 12,00,000 which is 80% of work certified. Hence work certified is 12,00,000/80% = 15,00,000

2) In the given problem work certified is 50% of contract price (15,00,000 / 30,00,000 x 100). As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 77{,}000 \times \frac{2}{3} \times \frac{12{,}00{,}000}{15{,}00{,}000} = \mathbf{41{,}067}$$

Problem 7:

Following details are available for a Contract

Contract Price	50,00,000
Cost Incurred	28,00,000
Cash received (90% of work certified)	27,00,000
Work not certified	3,00,000

Calculate the amount to be credited to Profit & Loss A/c for the year ended 31st March 2023.

Solution:

Contract A/c for year ending 31st March 2023

Particulars	Amount	Particulars		Amount
To Costs incurred on contract	28,00,000	By Work in progress		
		Work certified	30,00,000	
		Work uncertified	3,00,000	33,00,000
To Notional Profit c/f	5,00,000			
	33,00,000			**33,00,000**
To P & L A/c (WN 2)	3,00,000	By Notional Profit b/d		5,00,000
To Work in progress A/c (bal. fig)	2,00,000			
	5,00,000			**5,00,000**

Working Notes:

1) Cash received = 90% of work certified, hence Work Certified = Cash Received/ 90% = 30,00,000.

2) In the given problem work certified is 60% of contract price (30,00,000 / 50,00,000 x 100). As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 5{,}00{,}000 \times \frac{2}{3} \times \frac{27{,}00{,}000}{30{,}00{,}000} = \mathbf{3{,}00{,}000}$$

Problem 8 (When work certified is less than 25% of contract price):

Agni Construction Ltd. has taken following contract on 1st April 2022. The position of the contract on 31st March 2023 is as follows

Contract Price	35,00,000
Work certified	8,40,000
Work not certified	35,000
Cost incurred	7,00,000

Prepare Contract Account for the year ending 31st March 2023)

Solution:

Contract A/c for year ending 31st March 2023

Particulars	Amount	Particulars		Amount
To costs incurred	7,00,000	By Work in progress		
		Work certified	8,40,000	
		Work uncertified	35,000	8,75,000
To Work in progress A/c	1,75,000			
	8,75,000			**8,75,000**

Working Note:

1) In this case the work certified is 24% (8,40,000/ 35,00,000) of the contract price, so, it's less than 25% of the contract price. In this case notional profit shall not be calculated and whole of the balance shall be transferred to the Work in Progress Account (only in case the total of credit side is more than the debit side. If however, total of debit side is more than credit side, in such case the entire amount of loss shall be transferred to Profit & Loss A/c)

Problem 9:

Samrat Construction Ltd. has taken two contracts on 1st April 2023. The position of the contracts on 31st March 2024 is as follows:

Particulars	Contract 1	Contract 2
Contract price	40,50,000	90,00,000
Materials	8,70,000	16,20,000
Wages Paid	16,86,000	24,75,000
Other expenses	42,000	90,000
Plant at site (at cost)	2,40,000	4,50,000
Unused material at site	60,000	90,000
Wages payable (outstanding)	54,000	81,000
Other expenses (outstanding)	6,000	13,500
Work certified	24,00,000	45,00,000
Cash received	18,00,000	33,75,000
Work uncertified	1,20,000	1,35,000

The plant is to be depreciated at 10%. Prepare the contract account in respect of each contract showing the notional profit and also profit to be transferred to profit and loss account.

Solution:

Contract A/c for year ending 31st March 2024

Particulars	Contract 1	Contract 2	Particulars	Contract 1	Contract 2
To materials	8,70,000	16,20,000	By work in progress		
To wages	16,86,000	24,75,000	By work certified	24,00,000	45,00,000
To wages payable	54,000	81,000	By work uncertified	1,20,000	1,35,000
To depreciation on plant	24,000	45,000	By unused material	60,000	90,000
To other expenses	42,000	90,000			
To other expenses due	6,000	13,500	By P&L A/c (loss)	1,02,000	
To notional profit c/d		4,00,500			
	26,82,000	**47,25,000**		**26,82,000**	**47,25,000**
To P & L A/c (WN 2)		2,00,250	By notional profit b/d		4,00,500
To Work in progress A/c (bal. fig)		2,00,250			
		4,00,500			**4,00,500**

Working Notes:

1) Depreciation on plant has been calculated at 10%. Time factor has been ignored as per annum is not given in the rate

Depreciation

For contract 1 = Cost x Depreciation @ 10% = 2,40,000 x 10%	24,000
For contract 2 = Cost x Depreciation @ 10% = 4,50,000 x 10%	45,000

2) In the given problem work certified is 50% of contract price (45,00,000 / 90,00,000 x 100). As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 4{,}00{,}500 \times \frac{2}{3} \times \frac{33{,}75{,}000}{45{,}00{,}000} = \mathbf{2{,}00{,}250}$$

Problem 10:

Prepare contract account with the help of following

Direct Material	1,54,000
Wages	1,21,000
Special plant	99,000
Stores issued	49,500
Loose tools	13,750
Cost of tractor used	6,60,000
Fuel for tractor	22,000
Wages for tractor driver	44,000

Contract was completed in 26 weeks at the end of which the plant was returned subject to depreciation of 20% on original cost. The value of loose tools and stores returned were Rs. 2,750 and Rs. 5,500 respectively. The tractor is subject to a depreciation of 20% per annum. Provide office overheads at 10% of the works/factory cost. The contract was agreed to be performed at a profit of 25% of the total cost.

Solution:

Contract A/c for year ending _____

Particulars	Amount	Particulars	Amount
To Direct material	1,54,000	By plant returned	
To Wages	1,21,000	Cost: 99,000	
To Special plant	99,000	Less Depreciation: (19,800) (wn-1)	79,200
To Stores issued	49,500	By tractor returned	
To Loose tools	13,750	Cost: 6,60,000	
To Tractor	6,60,000	Less Depreciation: (66,000) (wn-2)	5,94,000
To Fuel for tractor	22,000	By Loose tools returned	2,750
To Wages of tractor driver	44,000	By Stores returned	5,500
		By Factory/Works cost c/f	4,81,800
	11,63,250		**11,63,250**
To Factory/Works cost b/d	4,81,800		
To office overheads (wn 3)	48,180	By Total cost c/f	5,29,980
	5,29,980		**5,29,980**
To Total cost b/d	5,29,980		
To profit (wn 4)	1,32,495	By Contractee A/c	6,62,475
	6,62,475		**6,62,475**

Working Notes:

1) Depreciation on special plant shall be calculated at 20% (ignoring the time factor as per annum is not given with the rate). Depreciation would be Rs. 19,800 (Rs. 99,000 × 20/100).
2) Depreciation on tractor has been calculated for 26 weeks (on the basis of time as the per annum is given with the rate). Depreciation would be Rs. 12,000 (Rs. 6,60,000 × 20/100 × 26 Weeks/52 Weeks)
3) Office overheads are 10% of the works cost so the amount would be Rs. 48,100 (Rs. 4,81,800 × 10/100).
4) Profit is 25% on cost so the amount would be Rs. 1,32,495 (Rs. 5,29,980 × 25/100).
   * As this is a cost-plus contract, so the contract price has been calculated by adding the profit of 25% to the total cost.

Problem 11:

The **Build-fast Construction Company Ltd.** has undertaken the construction of a bridge over the Girna river for a NHAI. The value of the contract is Rs. 25,00,000 subject to a retention 0f 20% until one year after the certified completion of the contract, and final approval of the NHAI engineer. The following are the details as shown in the books on 31st March 2024:

Particulars	Amount
Labour on site	8,10,000
Material direct to site less returns	8,40,000
Materials received from stores	1,62,400
Hire and use of plant	24,200
Direct expenses	46,000
General overheads allocated to the contract	74,200
Material in hand on 31st March 2024	12,600
Wages outstanding on 31st March 2024	15,600
Direct expenses outstanding on 31st March 2024	3,200
Work not certified by NHAI engineer	33,000
Work certified by NHAI engineer	22,00,000
Cash received	17,60,000

Prepare Contract Account, Contractee's Account and Work in Progress Account.

Solution:

Contract A/c for year ending 31st March 2024

Particulars	Amount	Amount	Particulars	Amount	Amount
To labour on site	8,10,000		By Materials in hand		12,600
Add outstanding	15,600	8,25,600	By work in progress		
To materials direct to site		8,40,000	By work certified		22,00,000
To materials from stores		1,62,400	By work uncertified		33,000
To hire & use of plant		24,200			
To direct expenses	46,000				
Add outstanding	3,200	49,200			
To general overheads		74,200			
Allocated to contract					
To notional profit c/f		2,70,000			
		22,45,600			**22,45,600**
To P & L A/c (WN 1)		1,44,000	By notional profit		2,70,000
To Work in progress A/c (bal. fig)		1,26,000			
		2,70,000			**2,70,000**

Contractee A/c

Particulars	Amount	Particulars	Amount
To Balance c/f	17,60,000	By Cash A/c	17,60,000
	17,60,000		**17,60,000**

Work in Progress A/c

Particulars	Amount	Particulars	Amount
To work in progress		By contract A/c	1,26,000
To work certified	22,00,000	(transfer to reserve)	
To work uncertified	33,000	By balance c/f	21,07,000
	22,33,000		**22,33,000**

Working Notes:

1) In the given problem work certified is 88% of contract price (22,00,000 / 25,00,000 × 100). As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 2{,}70{,}000 \times \frac{2}{3} \times \frac{17{,}60{,}000}{22{,}00{,}000} = \mathbf{1{,}44{,}000}$$

Problem 12:

Following information related to building contract for Rs. 30,00,000

Particulars	2022	2023
Materials issued	9,00,000	2,52,000
Direct wages	6,90,000	3,15,000
Direct expenses	66,000	30,000
Indirect expenses	18,000	4,200
Work certified	22,50,000	30,00,000
Work uncertified	24,000	0
Materials at site	15,000	21,000
Plant issued	42,000	6,000
Cash received from contractor	18,00,000	30,00,000

The value of plant at the end of 2022 and 2023 was Rs. 21,000 and Rs. 15,000 respectively. P**repare (i) Contract Account, (ii) Contractee Account for two years 2022 and 2023.**

Solution:

Contract A/c for year ending 2022

Particulars	Amount	Particulars	Amount
To materials issued	9,00,000	By materials at site	15,000
To direct wages	6,90,000	By work in progress	
To direct expenses	66,000	Work certified	22,50,000
To indirect expenses	18,000	Work uncertified	24,000
To plant issued	42,000	By plant at site 42,000	
To notional profit c/f	5,94,000	Less depreciation -21,000	21,000
	23,10,000		**23,10,000**
To P & L A/c (WN 1)	3,16,800	By notional profit b/d	5,94,000
To Work in progress A/c (bal. fig)	2,77,200		
	5,94,000		**5,94,000**

Contract A/c for year ending 2023

Particulars	Amount	Particulars		Amount
To work in progress A/c	19,96,800	By materials at site		21,000
To materials issued	2,52,000	By plant at site	21,000 + 6,000	
To direct wages	3,15,000	Less depreciation	–15,000	12,000
To direct expenses	30,000	By contractee A/c		30,00,000
To indirect expenses	4,200			
To plant issued	6,000			
To Profit & Loss A/c	4,29,000			
	30,33,000			**30,33,000**

Work in progress A/c

Particulars	Amount	Particulars	Amount
To Contract A/c (2022)		By Contract A/c (2022)	2,77,200
Work certified	22,50,000	(transferred to reserve)	
Work uncertified	24,000	By balance c/f	19,96,800
	22,74,000		**22,74,000**
To balance b/d	19,96,800	By Contract A/c (2023)	19,96,800
	19,96,800		**19,96,800**

Contractee A/c

Particulars	Amount	Particulars	Amount
To Balance C/f	18,00,000	By cash	18,00,000
	18,00,000		**18,00,000**
To Contract A/c	30,00,000	By balance c/f	18,00,000
		By Cash A/c (balancing figure)	12,00,000
	30,00,000		**30,00,000**

Working Notes:

1) In the 2021 work certified is 75% of contract price (22,50,000 / 30,00,000 × 100). As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\boxed{\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}}$$

$$= 5{,}94{,}000 \times \frac{2}{3} \times \frac{18{,}00{,}000}{22{,}50{,}000} = \mathbf{3{,}16{,}800}$$

Problem 13:

Fast Track Contractors began their business on 1st April 2023. During the year 2023 the company engaged in only one contract whose contract price was Rs. 20,00,000. Of the plant and materials charged to the contract, plant which cost Rs. 20,000 and materials which cost Rs. 16,000 were lost in accident before they could be used in the contract.

On 31st March 2024, plant which cost Rs. 20,000 was returned to the store, the cost of work done but uncertified was Rs. 8,000 and materials costing Rs. 16,000 were in hand on site.

Charge 10% depreciation on plant crediting P&L A/c with 2/3 of profits received and compile contract account and balance sheet from following information:

Trial Balance on 31st March 2024

Particulars	Amount (Dr.)	Amount (Cr.)
Share capital		4,80,000
Creditors		40,000
Cash received from contract (80% of work certified)		8,00,000
Land & Building	1,72,000	
Bank Balances	1,00,000	
Charged to contract-		
Materials	3,60,000	
Plant	1,00,000	
Wages	5,60,000	
Expenses	28,000	
	13,20,000	**13,20,000**

Solution:

Contract A/c for year ending 31st March 2023

Particulars	Amount	Particulars	Amount
To materials	3,60,000	By work in progress	
To plant	1,00,000	Work certified	10,00,000
To wages	5,60,000	Work uncertified	8,000
To expenses	28,000	By P & L A/c	36,000
To notional Profit	84,000	(loss on plant & materials)	
		By Plant returned to store	18,000
		(20,000 – Depn @10% 2000)	
		By plant at site (WN 1)	54,000
		By materials at site	16,000
	11,32,000		**11,32,000**

To P & L A/c (WN 2)	44,800	By notional profit b/d	84,000
To Work in progress A/c (bal. fig)	39,200		
	84,000		**84,000**

Balance Sheet for year ending 31st March 2023

Liabilities	Amount	Amount	Particulars	Amount	Amount
Share Capital		4,80,000	Land & Building		1,72,000
Profit & Loss A/c	44,800		Plant in store	18,000	
Less loss on plant &	36,000	8,800	at site	54,000	72,000
materials			By materials at site		16,000
Creditors		40,000	By work in progress		
			Work certified	10,00,000	
			Work uncertified	8,000	
			Less reserve	(39,200)	
				9,68,800	
			Less cash received	(8,00,000)	1,68,800
			Bank Balance		1,00,000
		5,28,800			**5,28,800**

Working Notes:

1) Value of plant on site

Total value of plant	1,00,000
Plant lost	20,000
Plant returned to store at the end of the year	20,000
Plant remaining at site	60,000
Depreciation @ 10%	6,000
Value of plat at site	54,000

2) The work certified is 50% of contract price (10,00,000/20,00,000 × 100). As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 84{,}000 \times \frac{2}{3} \times \frac{8{,}00{,}000}{10{,}00{,}000} = \mathbf{44{,}800}$$

Problem 14:

Following is the trial balance of **Royal Construction Company**, engaged in execution of Contract No. 786, for the year ended 31st March 2024.

Trial Balance on 31st March 2024

Particulars	Amount (Dr.)	Amount (Cr.)
Contractee's Account (Amount received)		10,50,000
Buildings	5,60,000	
Creditors		2,52,000
Bank Balance	1,22,500	
Capital Account		17,50,000
Materials	7,00,000	
Wages	6,30,000	
Expenses	1,64,500	
Plant	8,75,000	
	30,52,000	**30,52,000**

The work on Contract 786 was commenced on 1st April 2023, materials costing Rs.5,95,000 were sent to site but out of those materials worth Rs. 21,000 were destroyed by fire. Wages of Rs. 6,30,000 were paid during the year. Plant costing Rs. 1,75,000 was used all through the year. Plant with cost of Rs.7,00,000 was used from 1st April to 31st December and was then returned to stores. Material worth Rs. 14,000 was on site at the end of the year.

The contract was for Rs. 21,00,000 and contractee pays 75% of work certified. The work certified was 80% of contract price at the end of the year. Uncertified work was estimated at Rs. 52,500 on 31st March 2024. Expenses are charged to contract at 25% of wages, plant is to be depreciated at 10% per annum.

Prepare Contract No. 786 Account for the year 2023-24 and prepare the balance sheet as on 31st March 2024 in the books of Royal Construction Company.

Solution:

Contract No. 786 A/c for year ending 31st March 2024

Particulars	Amount	Particulars	Amount
To Materials	5,95,000	By P& L A/c (materials destroyed)	21,000
To Wages	6,30,000	By Plant returned to stores	6,47,500
To Expenses (25% of wages)	1,57,500	(7,00,000 – 52,500) (WN 1)	
To Plant	8,75,000	By Plant at site (WN 1)	1,57,500
		By Materials at site	14,000
To Notional Profit	3,15,000	By Work in progress	

		Work certified	16,80,000
		Work uncertified	52,500
	25,72,500		25,72,500
To P & L A/c (WN 2)	1,57,500	By Notional Profit b/d	3,15,000
To Work in progress A/c (bal. fig)	1,57,500		
	3,15,000		**3,15,000**

Balance Sheet for year ending 31st March 2024

Liabilities	Amount	Amount	Particulars	Amount	Amount
Capital		17,50,000	Buildings		5,60,000
Profit & Loss A/c	1,57,500		Plant		
Less loss of materials	(21,000)	1,36,500	in stores	6,47,500	
			At site	1,57,500	8,05,000
Creditors		2,52,000	Materials		
			in stores	1,05,000	
			(7,00,000-5,95,000)		
			at site	14,000	1,19,000
			Unabsorbed expenses		7,000
			(1,64,500 - 1,57,500)		
			Work in progress		
			Work certified	16,80,000	
			Work uncertified	52,500	
				17,32,500	
			Less reserve	1,57,500	
				15,75,000	
			Less cash received from	10,50,000	
			Contractee		5,25,000
			Bank Balance		1,22,500
		21,38,500			**21,38,500**

Working Notes:

1) Value of plant on site

Total value of plant		8,75,000
Plant returned to store (after 9 months)	7,00,000	
Depreciation on said plant @10 % for 9 months	52,500	
Value of Plant returned		**6,47,500**

Plant remaining at site (8,75,000 – 7,00,000)		1,75,000
Depreciation on the plant @105		17,500
Value of plant at site at year end		**1,57,500**

** Since per annum is given along with the rate, the time factor shall be taken into consideration while calculating depreciation, and the depreciation shall be calculated for actual months the assets are put to use.*

2) The work certified is 80% of contract price. As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 3{,}15{,}000 \times \frac{2}{3} \times \frac{12{,}60{,}000}{16{,}80{,}000} = \mathbf{1{,}57{,}500}$$

** Cash received is 75% of Work certified i.e. 75% of 16,80,000 = 12,60,000*

Problem 15:

Vaayu Construction Ltd. started its business with paid up capital of Rs. 1 crore. On 1st April 2023 it took contract for building of Rs. 1 crore 20 lakhs. Cash received on account of contract upto 31st March 2024 was 36 Lakhs (being 90% of work certified). Work uncertified was estimated at Rs. 2 Lakhs. As on 31st March 2024, the cost of materials on site was Rs. 60,000 and outstanding wages were Rs. 10,000. Of plant and machinery charged to contract, machinery costing Rs. 4,00,000 was returned to store at the end of the year. Plant and machinery charged to contract is depreciated at 5%. **Prepare Contract A/c and Balance Sheet as on 31st March 2024 from the following balances.**

Trial Balance on 31st March 2024

Particulars	Amount
Land and Building	46,00,000
Plant & Machinery (60% at site)	50,00,000
Furniture	1,20,000
Materials	28,00,000
Fuel and power	2,50,000
Site expenses	10,000
Office expenses	24,000
Rates and taxes	30,000
Cash at bank	2,66,000
Wages	5,00,000

Solution:

Contract A/c of Vayu Ltd. for year ending 31st March 2023

Particulars	Amount	Particulars	Amount
To materials	28,00,000	By work in progress	
To plant & machinery sent to site	30,00,000	Work certified (36L/90%)	40,00,000
To wages 5,00,000		Work uncertified	2,00,000
add outstanding 10,000	5,10,000		
To fuel and power	2,50,000	By plant returned to store	3,80,000
To site expenses	10,000	(4,00,000 – 20,000) (depⁿ @ 5%)	
To office expenses	24,000	By plant at site	24,70,000
To rates and taxes	30,000	(26,00,000 – 1,30,000) (depⁿ@ 5%)	
To Notional Profit c/f	4,86,000	By material on site	60,000
	71,10,000		**71,10,000**
To P & L A/c (WN 1)	1,45,800	By notional profit b/d	4,86,000
To Work in progress A/c (bal. fig)	3,40,200		
	4,86,000		**4,86,000**

Balance Sheet for year ending 31st March 2023

Liabilities	Amount	Particulars		Amount
Share Capital	1,00,00,000	Land and Building		46,00,000
Profit & Loss A/c	1,45,800	Furniture		1,20,000
(WN1)		Plant at machinery at store		23,80,000
Outstanding wages	10,000	(20,00,000 + 3,80,000)		
		Plant & machinery at site		24,70,000
		Material on site		60,000
		Work in progress		
		Work certified	40,00,000	
		Work uncertified	2,00,000	
			42,00,000	
		Less reserve	(3,40,200)	
			38,59,800	
		Less cash recd.	(36,00,000)	2,59,800
		Cash at Bank		2,66,000
	1,01,55,800			**1,01,55,800**

Working Notes:

1) The work certified is 33.33% of contract price (40 Lakhs/120 Lakhs × 100). As the value of work certified is less than 50% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\boxed{\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{1}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}}$$

$$= 4{,}86{,}000 \times \frac{1}{3} \times \frac{36{,}00{,}000}{40{,}00{,}000} = \mathbf{1{,}45{,}800}$$

Problem 16:

Following information relates to the contract undertaken by the company for Rs. 40 Lakhs

Particulars	2021-22	2022-23	2023-24
Materials sent to site	4,85,000	6,25,000	3,45,000
Wages incurred	4,15,000	4,80,000	3,00,000
Expenses	20,000	30,000	15,000
Plant issued to site	5,00,000	1,00,000	0
Materials at site	10,000	60,000	5,000 (Returned to store)
Work certified	9,00,000	30,00,000	40,00,000
Work uncertified	40,000	45,000	0

The work on contract commenced on 1st April 2021 and plants were issued at the beginning of each year. Depreciation on plant was charged at 20% per annum. The contractee has paid 90% of work certified every year and settled the account on 30th September 2023, the date of completion of contract. **Prepare contract account, contractee account and work in progress account for year 2021-22, 2022-23 and 2023-24.**

Solution:

Contract A/c for year ending 31st March 2022

Particulars	Amount	Particulars	Amount
To materials sent to site	4,85,000	By work in progress	
To plant issued to site	5,00,000	Work certified	9,00,000
To wages incurred	4,15,000	Work uncertified	40,000
To expenses	20,000		
		By plant at site (5,00,000 – 1,00,000) (being depⁿ @ 20% per annum)	4,00,000

		By material at site	10,000
		By profit & loss A/c	70,000
		(loss transferred)	
	14,20,000		**14,20,000**

Contract A/c for year ending 31st March 2023

Particulars	Amount	Particulars	Amount
To opening balances		By work in progress	
Work in progress		Work certified	30,00,000
Work certified	9,00,000	Work uncertified	45,000
Work uncertified	40,000		
Plant at site	4,00,000	By plant at site	
Material at site	10,000	(4,00,000 + 1,00,000 – 1,00,000)	4,00,000
		(being depn @ 20% per annum)	
To materials sent to site	6,25,000		
To plant issued to site	1,00,000	By materials at site	60,000
To wages incurred	4,80,000		
To expenses	30,000		
To notional profit c/f	9,20,000		
	35,05,000		**35,05,000**
To P & L A/c (WN 1)	5,52,000	By notional profit b/d	9,20,000
To Work in progress A/c (bal. fig)	3,68,000		
	9,20,000		**9,20,000**

Contract A/c for year ending 31st March 2024

Particulars	Amount	Particulars	Amount
To opening balances		By work in progress (Reserve)	3,68,000
Work in progress			
Work certified	30,00,000	By contractee A/c (contract price)	40,00,000
Work uncertified	45,000		
Plant at site	4,00,000	By plant returned to store	
Material at site	60,000	(4,00,000 – 50,000)	3,50,000
		(being depn @ 20% for 6 months)	
To materials sent to site	3,45,000		
To wages incurred	3,00,000	By materials returned to store	5,000
To expenses	15,000		
To P & L A/c	5,58,000		
	47,23,000		**47,23,000**

Contractee's A/c

Particulars	Amount	Particulars	Amount
31st March 2022		31st March 2022	
To Balance c/f	8,10,000	By Bank (90% of work certified)	8,10,000
	8,10,000		**8,10,000**
31st March 2023		31st March 2023	
		By balance b/d	8,10,000
To Balance c/f	27,00,000	By Bank	18,90,000
	27,00,000		**27,00,000**
30th September 2023		30th September 2023	
		By balance b/d	27,00,000
To Contract A/c	40,00,000	By Bank	18,90,000
	40,00,000		**40,00,000**

Work in Progress A/c

Particulars	Amount	Particulars	Amount
31st March 2022		31st March 2022	
To Contract A/c			
Work certified	9,00,000		
Work not certified	40,000	By Balance c/f	9,40,000
	9,40,000		**9,40,000**
31st March 2023		31st March 2023	
To Balance B/d	9,40,000	By Contract A/c (transfer)	9,40,000
To Contract A/c		By Contract A/c (reserve)	3,68,000
Work certified	30,00,000		
Work not certified	45,000	By Balance c/f	26,77,000
	39,85,000		**27,00,000**
30th September 2023		30th September 2023	
To Balance b/d	26,77,000	By Contract A/c (transfer)	26,77,000
	26,77,000		**26,77,000**

Working Notes:

1) The work certified is 75% of contract price (30,00,000 / 40,00,000). As the value of work certified is equal to or more than 50% of contract price but less than 90% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 9{,}20{,}000 \times \frac{2}{3} \times \frac{27{,}00{,}000}{30{,}00{,}000} = \mathbf{5{,}52{,}000}$$

Contracts with Escalation Clause:

Problem 17:

Deluxe Limited undertook a contract for Rs.10,00,000 on 1st April 2023. On 31st March 2024 when the accounts were closed, the following details about the contract were gathered:

Particulars	Amount
Material purchased	2,00,000
Wages paid	90,000
General expenses	20,000
Plant purchased	1,00,000
Materials in hand on 31.03.2024	50,000
Wages accrued/outstanding on 31.03.2024	10,000
Work certified	4,00,000
Cash received	3,00,000
Work not certified	30,000
Depreciation on plant	10,000

The above contract contained an escalation clause which reads as follows: "In the event of price of materials and rates of wages increase by more than 5%, the contract price will increase accordingly by 25% of the rise in the cost of materials and wages beyond 5% in each case."

It was found that since the date of signing the agreement, the prices of materials and wage rates increased by 25%. The value of work certified does not take into account the effect of the above clause. Prepare the contract account.

Solution:

Contract A/c for year ending 31st March 2023

Particulars		Amount	Particulars	Amount
To Material purchased		2,00,000	By work in progress	
To Wages paid	90,000		Work certified	4,00,000
Add outstanding	10,000	1,00,000	Work uncertified	30,000
To General expenses		20,000	By plant at site	90,000
To Plant purchased		1,00,000	(1,00,000 – 10,000)	
			By Materials in hand	50,000

		By Contractee A/c (increase in Contract Price) (WN 1)	10,000
To Notional Profit c/f	1,60,000		
	5,80,000		**5,80,000**
To P & L A/c (WN 2)	40,000	By Notional Profit b/d	1,60,000
To Work in progress A/c (bal. fig)	1,20,000		
	1,60,000		**1,60,000**

Working Notes:

1) Only material and wages costs are subject to escalation clause. So these costs are:

- Material cost is Rs. 1,50,000 i.e. Rs. 2,00,000 – Rs. 50,000 (Material in hand)
- Wages cost is Rs. 1,00,000 i.e. Rs. 90,000 + Rs. 10,000 (Outstanding)

The escalation clause is applicable only in the event of price of materials and rates of wages increase by more than 5%. In the event of price of materials and rates of wages does not increase by more than 5% then the escalation clause is not applicable.

Further, in the event of price of materials and rates of wages increase by more than 5% i.e. in the event escalation clause is applicable then the contract price will increase accordingly by 25% of the rise in the cost of materials and wages beyond 5% in each case.

Since the date of signing the agreement, the prices of material and wage rates have increased by 25%. So as per the escalation clause the contract price will increase by 25% of the rise in the cost of materials and wages beyond 5% in each case. Because the increase in cost of material and wage rates is 25% and beyond 5% it is 20% (i.e. over 5% it is 20%) so the contract price will increase by 25% of 20% increase.

Effect of increase in price on materials

Total increase	Increase upto 5%	Increase beyond 5%
Rs. 1,50,000 $\times \frac{25}{125}$ = 30,000	Rs. 1,50,000 $\times \frac{5}{125}$ = 6,000	Rs. 1,50,000 $\times \frac{20}{125}$ = 24,000

Effect of increase in price on wages

Total increase	Increase upto 5%	Increase beyond 5%
Rs. 1,00,000 $\times \frac{25}{125}$ = 20,000	Rs. 1,00,000 $\times \frac{5}{125}$ = 4,000	Rs. 1,00,000 $\times \frac{20}{125}$ = 16,000

Combined increase beyond 5% for both wages and materials is 24,000 + 16,000 = 40,000. Therefore Increase in contract price (Contract price will increase by 25% of

increase in cost of materials and wages beyond 5% in each case) = $40,000 \times \frac{25}{100}$ = **Rs. 10,000.**

2) The work certified is 33.33% of contract price (4,00,000/10,00,000 × 100). As the value of work certified is less than 50% of contract price, the profit to be transferred to profit and loss A/c shall be calculated using the following formula:

$$\boxed{\text{Profit \& Loss A/c} = \text{Notional Profit} \times \frac{1}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}}}$$

$$= 1,60,000 \times \frac{1}{3} \times \frac{3,00,000}{4,00,000} = \mathbf{40,000}$$

:: EXERCISES ::

Write Short Notes on :

1. Features of Contract Costing.
2. Difference between Contract Costing & Job Costing.
3. Treatment of depreciation on plant and machinery while preparing contract account.
4. Concept of work in progress- work certified and work uncertified.
5. Notional profit.
6. Estimated profit.
7. Escalation clause in contract accounting.

Answer the following:

1. Explain the meaning of accounting for construction contracts. What are the types of contracts?
2. Briefly explain the accounting procedure for construction contracts.
3. Explain the percentage completion method and how the profit of incomplete contracts is transferred to profit & loss account/
4. Explain the meaning of cost plus contracts. What are the advantages and limitations of cost plus contracts?

:: UNSOLVED PROBLEMS ::

Problem 1 :

The total contract price of a contract is Rs. 20,00,000. On 31st March 2023, the value of work certified was Rs. 15,00,000 and the total cost incurred was Rs. 11,00,000. The value of work uncertified was Rs.50,000. The cash received was Rs. 10,00,000. **You are required to determine**

the amount of the profit to be taken to the P & L a/c and to the work in progress account (reserve).

Problem 2 :

Following is the information related to contract

Contract Price	45,00,000
Wages	12,30,000
General Expenses	64,500
Raw Materials	9,00,000
Plant	1,50,000

As on 31st March 2023, cash received was Rs. 18,00,000; being 80% of work certified. The value of materials remaining at the site was Rs. 75,000. Depreciate plant by 15%. **Prepare the contract account.**

Problem 3 :

Wonderful Construction Ltd. has taken following contract on 1st April 2022. The position of the contract on 31st March 2023 is as follows :

Contract Price	70,00,000
Work certified	16,80,000
Work not certified	70,000
Cost incurred	15,40,000

Prepare Contract Account for the year ending 31st March 2023)

Problem 4 :

Prepare contract account with the help of following :

Direct Material	2,31,000
Wages	1,81,500
Special plant	1,48,500
Stores issued	74,250
Loose tools	20,625
Cost of JCB used	9,90,000
Fuel for JCB	33,000
Wages for JCB driver	66,000

Contract was completed in 26 weeks at the end of which the plant was returned subject to depreciation of 20% per annum on original cost. The value of loose tools and stores returned were

Rs. 4,125 and Rs. 8,250 respectively. The JCB is subject to a depreciation of 20% per annum. Provide office overheads at 10% of the works/factory cost. The contract was agreed to be performed at a profit of 25% of the total cost.

Problem 5 :

Following information related to building contract for Rs. 15,00,000 :

Particulars	2020	2021
Materials issued	4,50,000	1,26,000
Direct wages	3,45,000	1,57,500
Direct expenses	33,000	15,000
Indirect expenses	9,000	2,100
Work certified	11,25,000	15,00,000
Work uncertified	12,000	0
Materials at site	7,500	10,500
Plant issued	21,000	3,000
Cash received from contractor	9,00,000	15,00,000

The value of plant at the end of 2021 and 2022 was Rs. 10,500 and Rs. 7,500 respectively. prepare (i) Contract Account, (ii) Contractee Account for two years 2021 and 2022.

Problem 6 :

Klassic Contractors began their business on 1st April 2022. During the year 2022 the company engaged in only one contract whose contract price was Rs 50,00,000. Of the plant and materials charged to the contract, plant which cost Rs 50,000 and materials which cost Rs. 40,000 were lost in accident before they could be used in the contract.

On 31st March 2023, plant which cost Rs 50,000 was returned to the store, the cost of work done but uncertified was Rs. 20,000 and materials costing Rs. 40,000 were in hand on site.

Charge 10% depreciation on plant crediting P&L A/c with 2/3 of profits received and compile contract account and balance sheet from following information:

Trial Balance on 31st March 2023

Particulars	Amount (Dr.)	Amount (Cr.)
Share capital		12,00,000
Creditors		1,00,000
Cash received from contract (80% of work certified)		20,00,000
Land & Building	4,30,000	
Bank Balances	2,50,000	

Charged to contract-		
Materials	9,00,000	
Plant	2,50,000	
Wages	14,00,000	
Expenses	70,000	
	33,00,000	**33,00,000**

Problem 7 :

Super Constructions Limited undertook a contract for Rs. 25,00,000 on 1st April 2022. On 31st March 2023 when the accounts were closed, the following details about the contract were gathered:

Particulars	Amount
Material purchased	5,00,000
Wages paid	2,25,000
General expenses	50,000
Plant purchased	2,50,000
Materials in hand on 31.03.2023	1,25,000
Wages accrued/outstanding on 31.03.2023	25,000
Work certified	10,00,000
Cash received	7,50,000
Work not certified	75,000
Depreciation on plant	25,000

The above contract contained an escalation clause which reads as follows: "In the event of price of materials and rates of wages increase by more than 10%, the contract price will increase accordingly by 30% of the rise in the cost of materials and wages beyond 10% in each case."

It was found that since the date of signing the agreement, the prices of materials and wage rates increased by 25%. The value of work certified does not take into account the effect of the above clause. **Prepare the contract account.**

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CHAPTER 4

Accounting for Foreign Branches

4.1 Introduction
4.2 Converting Trial Balance of a Foreign Branch in reporting currency
4.3 Preparation of Foreign Branch Final Accounts for incorporating its results in Head Office books
4.4 Refer to the AS 11 —The Effects of Changes in Foreign Exchange Rates (revised)
4.5 Ind-AS 21 —The Effects of Changes in Foreign Exchange Rates

4.1 Introduction :

The dictionary meaning of the word branch is any subordinate division of a business, subsidiary shop, office etc. According to the provisions contained in sec 2(14) of the Companies Act 2013 it would appear that a branch is any establishment carrying on either the same or substantially the same activity as that carried on by head office of the company.

A branch is a separate segment of a business. In order to increase the sales, business houses are requires marketing their products over a larger territory and may generally split their business into certain divisions or parts. These various parts or divisions may be located in different part of the same city or in different cities of the same country or in different countries in the world. These are known as branches. The head office controls the activities of various branches.

Features of Branch Accounting:

- Dependent branch do not maintain complete set of accounts. Accounts of dependent branch are maintained by head office.
- Branch account is nominal in nature and it is normally prepared to find profit or loss of each branch.
- Independent branch keeps full system of accounting at its place.
- If goods are sent at invoice price to the branch, the profit included in the amount of goods sent is eliminated while preparing branch account.

- Reconciliation of accounts of independent branch and foreign branch are made before finalizing the accounts of head office.

Objectives of Branch accounting : The main objectives and purpose of Branch accounting system are listed below:

- To ascertain financial position of each branch on a particular date.
- To ascertain the profit or loss of each branch separately.
- To evaluate the progress and performance of each branch.
- To have comparison of the results of a particular branch with previous year and also with the other branch of the same concern.
- To allow branch managers' commission on the basis of the profits of their branches.
- To generate information, this may be helpful for planning, control, and evolution of performance of each branch and for taking various managerial decisions.
- To differentiate between profit making and loss making branch so that necessary steps can be taken to improve performances of loss making branches.
- To meet the requirements of specific enactments as all branches of company must keep the accounts for audit purposes.

Types of Branches : From the accounting point of view, branches may be classified as follows:

1. Inland Branches are further classified as:
   a. Dependent Branches for which whole accounting records are kept at Head Office
   b. Independent Branches which maintain independent accounting records
2. Foreign Branches

1) Inland Branches are classified as follows :

(a) Dependent Branch: The term 'Dependent Branch' means a branch which does not maintain its own set of books. All records have to be maintained by the head office. When the business policies and the administration of a branch are wholly controlled by the head office, its accounts also are maintained by it. In such a case, Branch accounts are written up at the head office out of reports and returns received from the branch. The following are the main features of dependent branches:

- Goods are supplied by the head office to such branches either at cost price or at invoice price.
- Such branches sell only those goods which are received from the head office and are not usualy allowed to make purchases in open market except with the permission of the head office.
- All expenses of the branch such as rent, salary of staff, advertisement etc., are paid by the head office.

- Petty expenses such as cartage, entertainment, freights etc. are paid by the branch manager out of petty cash book balance. Such book is maintained at the branch either as simple petty cash book or on Imprest system.
- The branch manager is normally expected to sell the goods for cash only but he may be authorized to sell goods on credit as well.
- The amount received from cash sales or cash received from debtors is either remitted to the head office daily or deposited in the account of the head office in some local bank.

Methods of Branch Accounting : In case of a dependent branch, the head office may keep accounts of the branch to any of the following systems

- Debtors System – Most Popular Method
- Stock and Debtors system
- Wholesale System
- Final Account system

(b) **Independent Branch :** Independent branches are those which act independently within the broad policies framed by the Head office in conducting their day-to-day activities. These branches keep full system of accounting. They can purchase goods from the market, supply goods to the head office, pay cash expenses from the cash realised and deposit cash in their own account. The main features of independent branches are as follows.

- They need not depend on the Head office for their requirements of supplies of goods. They can make purchases themselves.
- They can sell goods only for cash and credit at any price they consider profitable.
- They need not remit the money received by them from cash sales and debtors to the Head office periodically. They can retain the funds and meet their day-to-day expenses out of those funds. Finally, if they have surplus cash in their hands, they can remit the same to the Head office.
- They keep a complete set of books for recording their transactions. So, they can prepare their own Trial Balance, Trading and Profit and Loss Account and Balance Sheet.
- However, as they are ultimately responsible to the Head office, at the end of every financial period, they are required to submit a copy of their Trial Balance to the Head office.

2) **Foreign Branches and Its Incorporation in Head Office Book :** When a branch is located in a country other than domestic country it is called a foreign branch. Such

branch will keep its books of accounts in foreign currency. Foreign branch usually maintains a complete set of books under double entry principles. So, the accounting principles of a Foreign Branch will be the same as those applying to an Inland Branch. Before a Trial Balance of the Foreign Branch is incorporated in the H.O. books, it has to be converted into home currency.

4.2 Converting Trial Balance of a Foreign Branch in reporting currency:

Foreign Branch : A foreign branch is nothing but an independent branch and located outside country. It maintains its accounts in a foreign currency because all transactions are made in the currency of that country. Trial balance is prepared form the foreign branch books and sends to the head office for incorporating in its books. The head office has to convert the trial balance received into currency of its own currency before incorporating the trial balance in its books of accounts, because of the facts that the foreign branch trail balance will be in the currencies of the country in which the branch is operating. After that branch trial balance is incorporated as usual in the books of the head office to prepare the final accounts. Conversion of Foreign Branch Trail Balance. The method of conversion depends on whether the exchange rate involved is fixed or fluctuating, which are discussed as follows :

Rules for conversion of branch trial balance into the books of head office: Following are the main rules which should be taken into consideration while converting the figures of foreign trial balance in the books of the head office for the purpose of their incorporation in the books of the head office:

1) **Fixed rate of exchange :** Where the rate of exchange the countries of the head office and that the branch is fairly constant, a fixed rate may be adopted for conversion of branch balances. In such a case, all the balances in the branch books are converted at the fixed rate with the exception :
   - Remittance by branch which are converted at the actual rates that are affected; and
   - The Head Office Account, which is converted at the rupee (or head office currency) equivalent appearing in the Branch Account in the head office books.
2) **Fluctuating rate of exchange :** When there is a violent fluctuation in the rate of exchange, the head office and branch will adopt a standard rate for conversion and all items in the Trial Balance will be converted at the standard rate which can be one of following three types :
   - Opening Rate
   - Closing Rate
   - Average Rate

The above rules for conversion in the circumstances may be laid down as follows :

a) **Fixed assets :** At the rate prevailing when purchased, or at the actual cost of remittance sent and used for the acquisition. It is known as opening rate. When, however, capital expenditure is spread over a period, the average rate for that period may be adopted. These assets are : building, land, machinery, furniture etc.

b) **Fixed liabilities :** At the rate when incurred, but if there has been a permanent fall in exchange which will necessitate a large amount of rupee being required when the liabilities come to be redeemed a reserve should be built up gradually in the head office books to meet such increased liabilities. These are converted at rate applicable when incurred. Normally these liabilities are created in the beginning. Thus, it should be converted into opening rate. For examples, debentures or long term liabilities etc.

c) **Current (floating) assets and current liabilities :** These are converted at the rate prevailing on the date of balance sheet. Since balance sheet is prepared at the end of accounting year, hence these assets and liabilities should be converted at the closing rate. Current assets includes cash, debtors, B/R investment, closing stock etc. and current liabilities includes creditors, bills payable, bank overdraft, etc.

d) **Opening and closing stock :** Which should be converted at the opening and closing rates respectively.

e) **Depreciation :** Which should be converted at the rate of conversion of the relevant assets.

f) **Provision for bad and doubtful debts :** Which should be converted at the same rate as that applicable to debtors, i.e. closing rate.

g) **Revenue items :** At the average rate for the period over which they have accrued except in the case of opening and closing stocks, depreciation and reserve for bad debts. Examples of revenue items are : salary, rent, interest, purchases, sales, etc.

h) **Remittances by branch :** Remittances to and from head office should be converted at actual proceeds. Therefor no calculation is required for conversion.

i) **Head office account :** The Head Office account should be converted at the figure standing in the branch account in the head office books. therefore, no calculation is required for conversion.

Difference in Exchange: As a result of conversion of branch trial balance in home currency, a difference in the trial balance is will often arise. If a loss (Dr.) results, it should be debited to Profit & Loss A/c, if a profit (Cr.) results, the prudent course is to credit it to an exchange Reserve A/c so as to provide for future losses on exchange.

Summary Table

Sr.	Nature of Account	Exchange Rate Applicable
1	Fixed Assets	Rates ruling at the time they were acquired.
2	Fixed Liabilities	Rates ruling as on the date of the Trial Balance.

3	Current Assets & Liabilities	Rates ruling as on the date of the Trial Balance.
4	Remittances sent by the branch	At the actual rates at which they were made.
5	Goods received from H.O. as well as goods returned to H.O.	At the rates ruling on the date of dispatch or the date of receipt.
6	The Nominal A/c's (except next two)	Average rate ruling during the accounting period.
7	Depreciation on Fixed Assets	Rate of conversion applicable in case of the particular asset concerned
8	Opening and Closing stocks	Rates ruling of on the opening and closing dates respectively.
9	Balance in H.O. A/c	Value at which the Branch A/c appears in H.O. books on the date.

4.3 Preparation of Foreign Branch Final Accounts for incorporating its results in Head Office books :

Foreign Branch are generally an independent branch. It maintains the financial records in the currency of the country where it is located. Being an independent branch, it prepares its own Trial Balance, and the Final Accounts in the local currency of the country wherein it is located. The foreign branch remits the copies of these statements to the head office. After receiving the branch Trial Balance, the head office proceeds to incorporate the same in its own books, because the branch belongs to the head office and unless the branch results are incorporated in the head office results, we cannot get the complete picture of the entire organisation.

Reconciliation Entry : Reconciliation should be done in the case when, Branch Account in the books of the Head Office, and the Head Office Account in the books of the Branch don't tally. For reconciliation, the entry is passed either in the books of the head office or in the books of the branch, but not in both the sets of the books.

Incorporating Branch Trial balance into Head office books :

- Incorporation of branch Profit & Loss
- Incorporation of branch Assets and Liabilities

1) **Incorporation of branch Profit and Loss :** The incorporation of the foreign branch results into the head office results are incorporated within the frameworks of the requirements of AS 11 - (Revised) Accounting for the Effects of Changes in Foreign Exchange Rates. For the purpose of incorporation of branch profit and loss, the head office can adopt any of the following two ways.

A) Detailed incorporation

B) Abridged incorporation.

The branch assets and liabilities are to be incorporated individually in the books of the head office, whether it is detailed incorporation or abridged incorporation. In case of detailed incorporation there can be two methods of incorporating goods related account and revenue accounts.

A] Detailed incorporation of profit/loss : In this case, the head office makes incorporation of all the revenue transactions / items of the branch with a view to prepare Branch Trading and Profit & Loss Accounts in the books of the head office. It means, the Branch Trading and Profit & Loss Accounts are prepared and through this account, all the revenue transactions of the branch are incorporated. The purpose of preparing these accounts is to find out the real profit or loss of the branch after making all the usual adjustments.

The head office in its books maintains only the Branch Account and the statements received from the foreign branch do not form part of the double entry system in the books of the head office. Therefore, all the entries to incorporate the items of revenue incomes and expenses should be passed through the Branch Account maintained in the head office. In case of detailed incorporation of branch results (profits/losses), there can be two methods of incorporating the items in the Branch Trial balance.

i. **First method / Individual item-wise incorporation method :** In this method one has to incorporate Branch trial balance by opening separate accounts for each and every item into Head office Books (Trial balance items are incorporated individually). In this method the head office pass journal entry for each item of branch trial balance. All debit items in branch trial balance are debited and branch account is credited with the total of these items. Similarly all credit items in branch trial balance are credited and branch account is debited with the total of these items.

ii. **Second method / Financial statement-wise classified items incorporation method :** (Trial balance items incorporation in classified manner, according to the nature of the item). In this method the items of the branch trial balance are classified according to Trading Account, Profit and Loss Account and Balance Sheet. In this case

- Aggregate of the items in the branch trial balance which relate to goods and the aggregate of the Direct Expenses items are closed by transferring to the Trading Account.

- Gross Profit / Loss as shown by the Branch Trading Account and the aggregate of the Indirect Expenses items and the Indirect Incomes items are closed by transferring to the Profit & Loss Account.
- The real accounts and personal accounts indicating assets and liabilities are shown in the balance sheet.

B] **Abridged incorporation of profit / loss :** In case of Abridged incorporation, the head office does not make incorporation of all the revenue transactions/ items of the branch. Only one entry is passed for the purpose of incorporating branch Net Profit / Net Loss. Under the Abridged incorporation the Memorandum Branch Trading and Profit & Loss Accounts is prepared by the head office for the purpose of finding out the branch profit or loss and only the final figure of net profit or loss of the branch is incorporated by the head office. The head office maintains only the Branch Account and through this account, the branch profit or loss is incorporated.

2) **Incorporation of branch Assets and Liabilities :** After incorporating the branch profit / loss by adopting any of the methods stated above, the next step is to incorporate branch assets and liabilities. This part of incorporation is done with a view to include branch Assets and Liabilities in the final balance sheet of the entire business.

Final Accounts on passing the entries for incorporation of branch trial balance in the head office books : After journalizing entries for incorporating branch profit / loss and branch assets and branch liabilities, the branch Final Accounts, namely Branch Trading and Profit & Loss Account or as the case may be the Branch Account and the branch balance sheet will be prepared. The branch income statement will appear in different manner depending upon the method of incorporation selected for incorporating branch profit / loss. But whatever the method may be adopted, the branch balance sheet will appear as usual.

Preparation of Branch Income Statement : Branch Income Statement using the First Detailed incorporation method (Incorporation of Branch trial balance by opening separate accounts for each and every item into Head office Books).

Preparation of Branch Balance Sheet : Once the above Accounts, namely Branch Trading and Profit & Los Account and the Branch Account are prepared. The next step is to prepare the Branch Balance Sheet. The branch balance sheet will be prepared in the usual manner. While preparing this foreign branch balance sheet we should keep in mind the requirements of the AS 11 (Revised) Accounting for the Effects of Changes in Foreign Exchange Rates.

As per AS 11 a foreign branch is to be classified either as Integral Foreign Operation or as Non-Integral Foreign Operation.

- The Exchange differences arising in the conversion of the trial balance of an Integral Foreign Operation should be recognised as income or as expenses in the period in which

they arise. It means such difference is debited or credited to the Profit & Loss Account for the year.

- The Exchange differences arising in the conversion of the trial balance of a Non-Integral Foreign Operation should be accumulated in a Foreign Currency Translation Reserve until the disposal of the net investment.

4.4 Refer to the AS 11 - The Effects of Changes in Foreign Exchange Rates (revised):

As per AS 11 (Revised 2003) It Classifies Foreign Branch Accounting into two Types

- Integral Foreign Operations
- Non-Integral Foreign Operations

1) **Integral Foreign Operation (IFO) :** It is a foreign operation, the activities of which are an integral part of those of the reporting enterprise. The business of IFO is carried on as if it were an extension of the reporting enterprise's operations. For example, sale of goods imported from the reporting enterprise and remittance of proceeds to the reporting enterprise.

2) **Non-Integral Foreign Operation (NFO) :** It is a foreign operation that is not an Integral Foreign Operation. The business of a NFO is carried on in a substantially independent way by accumulating cash and other monetary items, incurring expenses, generating income and arranging borrowing in its local currency. An NFO may also enter into transactions in foreign currencies, including transactions in the reporting currency. An example of NFO may be production in a foreign currency out of the resources available in such country independent of the reporting enterprise. The following are the indicators of Non- Integral Foreign Operation.
   - Control by reporting enterprises : While the reporting enterprise may control the foreign operation, the activities of foreign operation are carried independently without much dependence on reporting enterprise.
   - Transactions with the reporting enterprises are not a high proportion of the foreign operation's activities.
   - Activities of foreign operation are mainly financed by its operations or from local borrowings. In other words it raises finance independently and is in no way dependent on reporting enterprises.
   - Foreign operation sales are mainly in currencies other than reporting currency.
   - All the expenses by foreign operations are primarily paid in local currency, not in the reporting currency.
   - Day-to-day cash flow of the reporting enterprises is independent of the foreign enterprises cash flows.

- Sales prices of the foreign enterprises are not affected by the day-to-day changes in exchange rate of the reporting currency of the foreign operation.
- There is an active sales market for the foreign operation product.

The above are only indicators and not decisive or conclusive factors to classify the foreign operations as non-integral, much will depend on factual information, situations of the particular case and therefore, judgment is necessary to determine the appropriate classification. Controversies may arise in deciding the foreign branches of the enterprises into integral or non-integral. However, there may not be any controversy that subsidiary associates and joint ventures are non-integral foreign operation. In case of branches classified as independent for the purpose of accounting are generally classified as non-integral foreign operations.

Change In Classification : In the case of change in classification, accounting treatment is as under-

1ntegral to Non-Integral :

- Translation procedure applicable to non-integral shall be followed from the date of change.
- Exchange difference arising on the translation of non-monetary assets at the date of re-classification is accumulated in foreign currency translation reserve.

Non-Integral to Integral :

- Translation procedure as applicable to integral should be applied from the date of change.
- Translated amount of non-monetary items at the date of change is treated as historical cost.
- Exchange difference lying in foreign currency translation reserve is not to be recognized as income or expense till the disposal of the operation even if the foreign operation becomes integral.

Techniques For Foreign Currency Translation :

1) Integral Foreign Operation (IFO) : Following are the standard recommendations for foreign currency translation:

a) All transactions of IFO be translated at the rate prevailing on the date of transaction: This will require date wise details of the transaction entered by that operation together with the rates. Weekly or monthly average rate is permitted if there are no significant variations in the rate.

b) Translation at the balance sheet date :

- Monetary items at closing rate. (Monetary items are money held and assets and liabilities to be received or paid in fixed or determinable amounts of money. Cash, receivables and payables are examples of monetary items)

- Non-monetary items: The cost and depreciation of the tangible fixed assets is translated using the exchange rate at the date of purchase of the asset if asset is carried at cost. If tangible fixed asset is carried at fair value, translation should be done using the rate existed on the date of the valuation. (Non-monetary items are assets and liabilities other than monetary items. Fixed assets, investments in equity shares, inventories are examples of non-monetary assets)
- The cost of inventories is translated at the exchange rates that existed when the cost of inventory was incurred and realizable value is translated applying exchange rate when realizable value is determined which is generally closing rate.
- Exchange difference arising on the translation of the financial statement of integral foreign operation should be charged to profit and loss account.

2) **Non-Integral Foreign Operation :** Accounts of non-integral foreign operation are translated using the following principles:
   - Balance sheet items i.e. Assets and Liabilities both monetary and non-monetary : apply closing exchange rate.
   - Items of income and expenses : At actual exchange rates on the date of transactions. However, accounting standard allows average rate subject to materiality.
   - Resulting exchange rate difference should be accumulated in a "foreign currency translation reserve" until the disposal of "net investment in non-integral foreign operation".

4.5 Ind-AS 21 —The Effects of Changes in Foreign Exchange Rates:

Objective : Ind AS 21 describes how to account for the changes in foreign exchange rates. It includes how the foreign currency transactions will be recorded in the financial statements and converted into a presentation currency and will address how the foreign exchange rate affects the foreign currency transactions in the financial statements.

Scope : This Standard shall be applied:

- To the presentation and disclosure of the transactions and balances in foreign currencies.
- In case of consolidation, proportionate consolidation or the equity method, for understanding of the financial position of foreign operations.
- For analyzing the results and financial position into a presentation currency.
- To those foreign currency derivatives that are not within the scope of Ind AS 39. Also, this Standard applies only when an entity translates the derivative amounts from its functional currency to its presentation currency.

- To the presentation of an entity's financial statements in a foreign currency and for the compliance requirements of the resulting financial statements in accordance with the Indian Accounting Standards.

This Standard shall not be applied:

- To hedge accounting (Ind AS 39) for foreign currency items, including hedging a net investment in a foreign operation.
- To those derivative transactions and balances that are within the scope of Ind AS 39 Financial Instruments: Recognition and Measurement.
- To the presentation in a statement of cash flows (Ind AS 7) of the cash flows emerging from transactions in a foreign currency, or to the translation of cash flows of a foreign operation.

Definitions: The meaning of the following terms used repetitively in the Standard are:

- **Exchange Rate :** The exchange rate is when a single unit of foreign currency can be converted into Functional currency.
- **Exchange Difference :** Exchange difference is the difference resulting from translating the foreign exchange currency with the Functional currency.
- **Closing Rate :** The closing rate is the exchange rate prevailing at the end of the reporting period.
- **Foreign Currency :** Foreign currency is a currency prevailing in the financial operation.
- **Functional Currency :** Functional currency is the currency of the home country in which the entity operates.
- **Presentation Currency :** Presentation currency is the currency in which the financial statements are disclosed.
- **Fair Value :** Fair value is the amount at which two parties exchange an asset or a liability at an arm's length price.
- **Group :** A group is a holding company, including all its subsidiaries.
- **Monetary Items :** Monetary items are the assets and liabilities fixed from the point of Receivable and Payable in the foreign currency.
- **Net Investment :** Net investment is the amount invested by the reporting entity in the net assets of the foreign operation.
- **Spot Exchange Rate :** Spot exchange rate records the exchange rate for an immediate transaction.

Reporting foreign currency transactions in the functional currency :

- **Initial recognition :** On initial recognition in the functional currency, a foreign currency transaction shall be recorded at the actual rate that prevails on the date the transaction was made.

- **Reporting at the end of each period :** At the end of each reporting period:
  - Foreign currency monetary items shall be reported at the closing rate;
  - Non-monetary items that are sustained in terms of historical cost in a foreign currency shall be described using the exchange rate prevailing at the date the transaction was made; and
  - Non-monetary items that are measured at fair value in a foreign currency must be reported using the exchange rates at the date of determination of the fair value.
- **Recognition of Exchange Differences :** Any fluctuation in the Exchange rate shall be transferred to Profit or Loss in the period they arise.
- **Change in functional currency :** Accordingly, when the current functional currency changes, the new translation procedures shall be applicable to the new functional currency expected from the date of the change.

Using the presentation currency :

- **Translation to the Presentation Currency :** The financial position and the results of an entity shall be translated into a different presentation currency by taking into consideration:
  - Assets and liabilities for each balance sheet presented shall be recorded at the prevailing closing rate as at the date of that balance sheet;
  - Income and expenses for each statement of profit and loss granted shall be recorded at the persuading exchange rates at the transaction date; and
  - All accumulated exchange differences shall be recognized in other comprehensive income.
- **Translation to a Foreign Operation:** During the acquisition of a foreign operation, any goodwill and fair value adjustments to the carrying amounts of assets and liabilities shall be treated as assets and liabilities of the foreign operation. Accordingly, these goodwill and fair value adjustments shall be recorded at the Functional currency and then translated at the prevailing closing rate of the foreign operation.

Disclosure : The following are the disclosure requirements

- The cumulative exchange differences recognized as profit or loss in the financial statements, other than those foreign exchange transactions measured at Fair value, shall be disclosed.
- When the Functional currency of the entity changes, according to Ind AS 22, the reason for the change and the date of change in the Functional currency shall be disclosed.
- When the functional and presentation currencies are not the same, the Functional currency shall be disclosed stating the reason for using a different presentation currency.

Problem 1 :

How will you translate the following items of the New York Branch as on 31st March 2024.

Opening Stock	$ 8,200	Goods from H.O.	$ 58,800
Salaries & Wages	$ 15,200	Sales	$ 1,05,200
Closing Stock	$ 2400		

Goods sent to New York Branch in the H.O. Books amounted to Rs. 21,46,200

Exchanges rates :

On 01/04/2023	$ 1 =	Rs. 72.40
On 31/03/2024	$ 1 =	Rs. 74.80
Average of 2023-24	$ 1 =	Rs. 73.60

Solution :

Statement showing the Translation into Rupees

Item	$	Relevant Exchange Rate	Converted value in Rs.
Opening Stock	8,200	Opening Rate as on 01/04/2023	8,200 × 72.40 = 5,93,680
Goods from H.O.	58,800	To be taken at the Rupee	
		Value recorded in H.O. Books	21,46,200
Salaries & Wages	15,200	Average Rate of 2023-24	15,200 × 73.60 = 11,18,720
Sales	1,05,200	Average Rate of 2023-24	1,05,200 × 73.60 = 77,42,720
Closing Stock	2,400	C1osing Rate as on 31/03/2024	2,400 × 74.80 = 1,79,520

Problem 2 :

Following are the Balances of Jalgaon Head Office and Washington Branch on 31.12.2024

1. Stock as on 31.12. 2024 was valued at Head Office Rs. 8,76,000 and Washington Branch $ 1,56,000
2. Rates of Exchange were
   i. When Plant and Machinery and Fixtures were purchased 1 $ = 65.00
   ii. On 1.1.2024 : 1 $ = Rs. 74.50
   iii. On 31.12.2024 : 1 $ = Rs. 79.50
   iv. Average Rate : 1 $ = Rs. 77.00

Trial Balance

Particulars	Dr. $	Cr. $
Plant & Machinery	3,60,000	-
Furniture & Fixtures	24,000	-
Opening stock	1,68,000	-
Purchase	7,20,000	-
Goods from Head Office	2,40,000	-
Sales	--	12,48,000
Salary & Wages	24,000	-
Rents taxes	6,000	-
Insurance	3,000	-
Trade Exps.	6,000	-
Head Office	-	3,42,000
Sundry Debtors	72,000	-
Sundry Creditors	-	51,000
Cash in hand & with banks	18,000	-
Closing Stock	1,56,000	-

3. Goods sent from Head Office amounted to Rs. 2,35,60,000.
4. Head Office account closing balance amounted to Rs. 3,35,73,000.

You are Required to convert above Trial Balance into H.O. Currency.

Solution:

Statement showing conversion of foreign Branch Trial Balance into H.O. Currency.

Particulars	Dr. $	Cr. $	Exchange Rate		Dr. Rs.	Cr. Rs.
Plant & Machinery	3,60,000	-	65.00	DOA	2,34,00,000	-
Furniture & Fixtures	24,000	-	65.00		15,60,000	-
Opening stock	1,68,000	-	74.50	(OR)	1,25,16,000	-
Purchase	7,20,000	-	77.00	(AR)	5,54,40,000	-
Goods from Head	2,40,000	-	Goods sent to branch		2,35,60,000	-
Office		12,48,000	77.00		-	
Sales	-	-	77.00		18,48,000	9,60,96,000
Salary & Wages	24,000	-	77.00	(AR)	4,62,000	-
Rents taxes	6,000	-	77.00		2,31,000	-
Insurance	3,000	-	77.00		4,62,000	-
Trade Expenses	6,000		Branch A/C		-	-
Head Office Sundry	-	3,42,000	79.50		57,24,000	
Debtors Sundry	72,000	-	79.50	(CR)	-	3,35,73,000
Creditors	-	51,000	79.50		14,31,000	
Cash in hand & banks	18,000	-	79.50		1,24,02,000	
Closing Stock $	1,56,000	-				40,54,500

Problem 3 :

Popcorn Popup & Co. has head office at **Los Angeles (USA)** and branch at **Dhule (India).** Dhule branch furnishes you with its trial balance as on 31st March, 2024 and the additional information given there after:

Particulars	Dr. (Rs.)	Cr. (Rs.)
Stock on 1st April 2023	6,00,000	-
Purchases and sales	16,00,000	24,00,000
Sundry debtors and creditors	8,00,000	6,00,000
Bills of exchange	2,40,000	4,80,000
Wages and salaries	11,20,000	-
Rent rates and taxes	7,20,000	-
Sundry charges	3,20,000	-
Computers	4,80,000	-
Bank balance	8,40,000	-
Los Angeles Office a/c	-	32,40,000
	67,20,000	**67,20,000**

Additional information :

a) Computers were acquired from a remittance of US $ 6,486.49 received from Los Angeles head office and paid to the suppliers. Depreciate computers at 60% for the year.

b) Unsold stock of Dhule branch was worth Rs. 8,40,000 on 31st March 2024.

c) The rates of exchange may be taken as follows :

i) On 1.4.2023 @ Rs. 70.00 per US $

ii) On 31.3.2024 @ Rs. 78.00 per US $

iii) Average exchange rate for the year @ Rs. 74.00 per US $

iv) Conversion in $ shall be made up to two decimal accuracy.

You are asked to prepare in US dollars the revenue statement for the year ended 31stMarch, 24 and the balance sheet as on that date on Dhule branch as would appear in the books of Los Angeles head office of Popcorn Popup & Co. You are informed that Dhule branch account showed a debit balance of US $ 43,692.7 on 31.3.2024 in Los Angeles books and there were no item pending reconciliation.

Solution : **Trading & P/L A/c**

Particulars	Amount ($)	Particulars	Amount ($)
To Opening Stock	8,571.43	By Sales	32,432.43
To Purchase	21,621.62	By Closing Stock	10,769.23
To W & S	15,135.14	By Gross Loss	2,126.53
	45,328.19		**45,328.19**

To Gross Loss	2,126.53		
To Rent & Taxes	9,729.73		
To Sundry Charges	4,324.32		
To Depreciation on Computer (6,486.49 × 60%)	3,891.89	By Net Loss	20,072.47
	20,072.47		**20,072.47**

An Extract of Balance Sheet of Popcorn & Co. as at 31st March, 2024

Liabilities		Amount ($)	Assets		Amount ($)
Creditors		7,692.31	Computer	6,486.49	
Bills Payable		6,153.85	*Less :* Depreciation	3,891,89	2,594.60
H.O.	43,692.70		Debtors		10,256.41
Less : Net Loss	20,072.47	23,620.23	Bills Receivable		3,076.92
			Bank Balance		10,769.23
			Closing Stock		10,769.23
		37,466.39			**37,466.39**

Working Notes :

Statement showing conversion of Trial Balance in $

Particulars	Rate	Rs	Rs	$	$
Stock as on 1stApril, 2021	70.00	6,00,000	-	8,571.43	
Purchase & Sales	74.00	16,00,000	24,00,000	21,621.62	32,432.43
Debtors/Creditors	78.00	8,00,000	6,00,000	10,256.41	7,692.31
Bills of Exchange Wages &	78.00	2,40,000	4,80,000	3,076.92	6,153.85
Salaries Rent, Rates and Taxes Sundry charges	74.00	11,20,000	-	15,135.14	-
Computers	74.00	7,20,000	-	9,729.73	-
Bank balance	74.00	3,20,000	-	4,324.32	-
Los Angeles Office A/c	-	4,80,000	-	6486.49	-
	78.00	8,40,000	-	10,769.23	-
	-		32,40,000		43,692.70
		67,20,000	**67,20,000**	**89,971.29**	**89,971.29**
Closing Stock	**78.00**	**8,40,000**		**10,769.23**	

Problem 4 :

An **Chocolate manufacturing Sweet Tasty company** has a **branch at Sydney (Australia).** Its Trial Balance as at 30th September, 2024 is as follows :

	AUS $ Dr.	AUS $ Cr.
Plant and machinery	4,80,000	-
Furniture and fixtures	32,000	-
Stock, Oct.1,2021	2,24,000	-
Purchases	9,60,000	-
Sales	-	16,64,000
Goods from Indian Co.(H.O.)	3,20,000	-
Wages	8,000	-
Carriage inward	4,000	-
Salaries	24,000	-
Rent, rates and taxes	8,000	-
Insurance	4,000	-
Trade expenses	4,000	-
Head Office Account	-	4,56,000
Trade debtors	96,000	-
Trade creditors	-	68,000
Cash at bank	20,000	-
Cash in hand	4,000	-
	21,88,000	**21,88,000**

The following further information is given :

1. Wages outstanding is $ 4,000.
2. Depreciate Plant and Machinery and Furniture and Fixtures @ 10 percent p.a.
3. The Head Office sent goods to Branch for Rs. 1,57,60,000.
4. The Head office shows an amount of Rs. 1,72,00,000 due from Branch.
5. Stock on 30th September, 2024 was $ 2,08,000.
6. There were no in transit items either at the state or at the end of the year.
7. On September 1, 2022 when the fixed assets were purchased, the rate of exchange was Rs. 53 to one AUS $.
   On October 1, 2023 the rate was Rs. 54 to one AUS $.
   On September 30, 2024 the rate was Rs. 56 to one AUS $.
   Average rate during the year was Rs. 55 to one AUS $.

You are asked to prepare:

a) Trial balance incorporating adjustments given under 1 to 7 above, converting dollars in to rupees;

b) Trading and Profit and Loss Account for the year ended 30th September, 2024 and Balance sheet as on that date depicting the profitability and net position of the branch as would appear in India for the purpose of incorporating in the main Balance Sheet.

Solution : Converted Trial Balance as on 30 Sept. 2024

Particulars	Dr. $	Cr. $	Rate	Dr. Rs.	Cr. Rs.
Plant and Machinery	4,32,000		53	2,28,96,000	
Depreciation on above	48,000		53	25,44,000	
Furniture and fixtures	28,800		53	15,26,400	
Depreciation on above	3,200		53	1,69,600	
Stock 1.10.2023	2,24,000		54	1,20,96,000	
Purchases	9,60,000		55	5,28,00,000	
Sales		16,64,000	55		9,15,20,000
Goods from ***Sweet Testy*** Co.	3,20,000		Actual	1,57,60,000	
Wages (8,000 + 4,000)	12,000		55	6,60,000	
Outstanding wages		4,000	56		2,24,000
Carriage Inwards	4,000		55	2,20,000	
Salaries	24,000		55	13,20,000	
Rent, rates and taxes	8,000		55	4,40,000	
Insurance	4,000		55	2,20,000	
Trade expenses	4,000		55	2,20,000	
Head office A/c		4,56,000	Actual		1,72,00,000
Trade debtors	96,000		56	53,76,000	
Trade creditors		68,000	56		38,08,000
Cash at bank	20,000		56	11,20,000	
Cash in hand	4,000		56	2,24,000	
Difference in exchange					48,40,000
	21,92,000	**21,92,000**		**11,75,92,000**	**11,75,92,000**

Closing stock at Rs. 56 per dollar i.e. 2,08,000 × 56 = Rs. 1,16,48,000.

Note :

i. It is assumed that no depreciation on fixed assets has been charged since the date of purchase. Therefore fixed assets as shown in the Trial balance are at original cost and the given rate of 10% is on straight line method.

ii. If rate of depreciation is at 10% on written down value basis and value of fixed assets in the Trial balance are at written down value on 1.10.2023.

In both the above cases the depreciation figure will remain the same

Trading, Profit & Loss Account for the year ended 30.9.2024

Dr. **Cr.**

Particulars	Rs	Particulars	Rs
To Opening stock	1,20,96,000	By Sales	9,15,20,000
To Purchases	5,28,00,000	By Closing stock	1,16,48,000
To Goods from H.O.	1,57,60,000		
To Wages	6,60,000		
To Carriage Inward.	2,20,000		
To Gross Profit c/d	2,16,32,000		
	10,31,68,000		**10,31,68,000**

To Salaries		13,20,000	By Gross Profit b/d	2,16,32,000
To Rent Rates & taxes		4,40,000		
To Insurance		2,20,000		
To Trade expenses		2,20,000		
To Depreciation				
Machinery.	25,44,000			
Furniture	1,69,600	27,13,600		
To Net Profit Loss		1,67,18,400		
		2,16,32,000		**2,16,32,000**
To Net Profit to H.O		2,15,58,400	By Net Profit	1,67,18,400
			By Difference in exchange	48,40,000
		2,15,58,400		**2,15,58,400**

Branch Balance Sheet as at 30th Sept 2024

Liabilities	Rs	Assets		Rs
Head Office A/c	1,72,00,000	Plant & Machinery	2,54,40,000	
Profit & Loss A/c	2,15,58,400	Less Depreciation	25,44,000	2,28,96,000
Creditors	38,08,000	Furniture & fitting	16,96,000	
Outstanding wages	2,24,000	Less : Depreciation	1,69,600	15,26,400
		Stock		1,16,48,000
		Debtors		53,76,000
		Cash at Bank		11,20,000
		Cash in hand		2,24,000
	4,27,90,400			**4,27,90,400**

Problem 5 :

The **Rome (Italy)** branch of **Kapada Clothing ltd. (Nashik)** sent the following trial balance as on 31st December, 2024 :

Particular	€	€
Head office A/c		45,600
Sales		1,68,000
Debtors and creditors	9,600	6,800
Machinery	48,000	
Cash at bank	2,400	
Stock, 1 January, 2024	22,400	
Goods from H.O.	1,28,000	
Expenses	10,000	
	2,20,400	**2,20,400**

In the books head office, the Branch A/c stood as follows :

Rome (Italy) Branch A/c

Particular	Rs	Particular	Rs
To Balance b/d	16,20,000	By Cash	57,52,000
To Goods sent to branch	58,52,000	By Balance c/d	17,20,000
	74,72,000		**74,72,000**

Goods are sent to the branch at cost plus 10% and the branch sells goods at invoice price plus 25%. Machinery was acquired on 31stJanuary, 2019, when € 1.00 = 74

Rates of exchange were :

1st January, 2024	€ 1.00 = 80
31st December, 2024	€ 1.00 = 82
Average	€ 1.00 = 81

Machinery is depreciated @ 10% and the branch manager is entitled to a commission of 5% on the profits of the branch.

You are required to :

i. Prepare the Branch Trading & Prof & Loss A/c in dollars.

ii. Convert the Trial Balance of branch into Indian currency and prepare Branch Trading & Profit and Loss A/c and the Branch A/c in the books of head office.

Solution : **i) Branch Trading & P/L A/c in EURO €**

Particulars	Amount €	Particulars	Amount €
To Opening Stock	22,400	By Sales	1,68,000
To Goods from H.O	1,28,000	By Closing Stock (b/c)	16,000
To Gross Profit (1,68,000×25/125)	33,600		
	1,84,000		**1,84,000**
To Depreciation (48,000×10%)	4,800	By Gross Profit	33,600
To Expense	10,000		
To Branch Manager commission (33,600 - 10,000 - 4,800 × 5/100)	940		
To Net Profit	17,860		
	33,600		**33,600**

Branch B/s in €

Liabilities	Amount €	Assets		Amount €
Head office A/c	45,600	Machinery.	48,000	
P/L A/c	17,860	Less : Depreciation	4,800	43,200
O/S Managers	940	Debtor		9,600
Commission Creditors	6,800	Land & building		2,400
		Closing Stock		16,000
	71,200			**71,200**

Statement of conversion of Branch Trial Balance in Rs.

Particulars	€		Ex.	Rs.	
	Dr.	Cr.	Rate	Dr.	Cr.
H.O	-	45,600	Br. A/c		17,20,000
Sales	-	1,68,000	AR - 81		1,36,08,000
Debtor / Creditor	9,600	6,800	CR - 82	7,87,200	5,57,600
Machinery	4,800	-	Actual - 74	3,55,200	
Cash & Bank	2,400	-	CR - 82	1,96,800	
Opening stock	22,400	-	OR - 80	17,92,000	
Goods from H.O	1,28,000	-	Goods Sent to BR	58,52,000	
Expense	10,000	-	AR - 81	8,10,000	
Foreign Exchange Fluctuation	-	-		60,92,400	-
	2,20,400	**2,20,400**		**1,58,85,600**	**1,58,85,600**

Closing stock = € 16,000 × 82 = Rs. 13,12,000

O/S Manager's Commission = € 940 × 82 = Rs. 77,080

Branch A/c

Particulars	Amount Rs.	Particulars	Amount Rs.
To B/d	17,20,000	By Branch Debtor	7,87,200
To O/S Manager Commission	77,080	By Branch Machinery	3,19,680
To Branch Creditor	5,57,600	By Branch Cash & Bank	1,96,800
To P/L A/c	2,61,000	By Closing Stock	13,12,000
	26,15,680		**26,15,680**

Branch Trading & P/L A/c

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	17,92,000	By Sales	1,36,08,000
To Goods from H.O	58,52,000	By Closing Stock	13,12,000
To Gross Profit	72,76,000		
	1,49,20,000		**1,49,20,000**
To Foreign Exchange Fluctuation	60,92,400	By Gross Profit	72,76,000
To Expense	8,10,000		
To Branch Manager commission	77,080		
To Depreciation on Machinery	35,520		
To Net Profit	2,61,000		
	72,76,000		**72,76,000**

Balance Sheet

Liabilities	Amount Rs.	Assets	Amount Rs.
Head office A/c	17,20,000	Machinery	3,19,680
P/L A/c	2,61,000	Debtor	7,87,200
O/S Managers Commission	77,080	Cash & Bank	1,96,800
Creditors	5,57,600	Closing Stock	13,12,000
	26,15,680		**26,15,680**

Problem 6 :

Pass necessary Journal entries in the books of Las Vegas independent Branch of Water Balls Company, wherever required rectify or adjust the following:

i. Income of **$** 11,20,000 allocated to the Branch by Head Office but not recorded in the Branch books.

ii. Provision for doubtful debts, whose accounts are kept by the Head Office, not provided earlier for **$** 4,00,000

iii. Branch incurred travelling expenses of **$** 2,50,000 on behalf of other Branches, but not recorded in the books of Branch.

iv. A remittance of **$** 6,00,000 sent by the Branch has not received by Head Office on the date of reconciliation of Accounts.

v. Head Office allocates **$** 3,00,000 to the Branch as Head Office expenses, which has not yet been recorded by the Branch.

vi. Head Office collected **$** 1,20,000 directly from a Branch Customer. The intimation of the fact has been received by the Branch only now.

vii. Goods dispatched by the Head office amounting to **$** 4,00,000 but not received by the Branch till date of reconciliation. The Goods have been received subsequently.

viii. Branch paid **$** 12,00,000 as salary to a Head Office Manager, but the amount paid has been debited by the Branch to Salaries Account.

Solution :

Journal Entries in the books of Independent Branch of Water Balls Company

S.No.	Particulars	Amount $ (Dr)	Amount $ (Cr)
(i)	Head Office ……...…… Dr. To Income A/c (Being income allocated to branch by H.O.)	11,20,000	11,20,000
(ii)	Provision for Doubtful Debts A/c ….……..….. Dr. To Head Office A/c (Being Provision for Doubtful debts provided)	4,00,000	4,00,000
(iii)	Head Office A/c ……...……..… Dr. To Cash/ Bank A/c (Being the expenditure on account of other branches recorded in books)	2,50,000	2,50,000
(iv)	No entry		
(v)	Expenses A/c ……..……...…… Dr. To Head Office A/c (Being the allocated expenditure by the head office recorded in branch books)	3,00,000	3,00,000
(vi)	Head Office A/c ……..…...…… Dr. To Debtors A/c (Being the adjustment of collection from branch debtors)	1,20,000	1,20,000
(vii)	Goods in transit A/c …...…… Dr. To Head Office A/c (Being goods dispatched by H.O but yet not received)	4,00,000	4,00,000

(viii)	Head Office A/c …..…… Dr. To Salaries A/c (Being the rectification of salary paid on behalf of H.O.)	12,00,000	 12,00,000

Problem 7 :

DM Jalgaon has a branch in England which is an integral foreign operation of DM. At the end of the year 31st March, 2024, the branch furnishes the following trial balance in U. K. Pound:

Particulars	**£ Dr.**	**£ Cr.**
Fixed assets (Acquired on 1st April, 2020)	48,000	
Stock as on 1st April, 2023	22,400	
Goods from head Office	1,28,000	
Expenses	9,600	
Debtors	9,600	
Creditors		6,400
Cash at bank	2,400	
Head Office Account		45,600
Purchases	24,000	
Sales		1,92,000
	2,44,000	2,44,000

In head office books, the branch account stood as shown below:

England Branch A/c

Particulars	**Amount**	**Particulars**	**Amount**
To Balance B/d	40,20,200	By Bank A/c	1,04,32,000
To Goods sent to branch	98,52,000	By Balance C/d	34,40,000
	1,38,72,000		**1,38,72,000**

The following further information is given:

(a) Fixed assets are to be depreciated @ 10% p.a. on WDV.

(b) On 31st March, 2024:

Expenses outstanding	-	£ 800
Prepaid expenses	-	£ 400
Closing stock	-	£ 16,000

(c) Rate of Exchange:

1st April, 2020	-	Rs. 75 to £ 1
1st April, 2023	-	Rs. 80 to £ 1

31st March, 2024	-	Rs. 90 to £ 1
Average	-	Rs. 85 to £ 1

You are required to prepare:

i) Trial balance, incorporating adjustments of outstanding and prepaid expenses, converting U.K. pound into Indian rupees.

ii) Trading and profit and loss account for the year ended 31st March, 2024 and the Balance Sheet as on that date of England branch as would appear in the books of Jalgaon office.

Solution:

Trial Balance of England Branch as on 31st March, 2024

Particulars	U.K. Pound	Rate per U.K. Pound	Dr (Rs.)	Cr (Rs.)
Fixed Assets	48,000	75	36,00,000	
Stock (as on 1st April 2023)	22,400	80	17,92,000	
Goods from Head Office	1,28,000	-	98,52,000	
Sales	1,92,000	85		1,63,20,000
Purchases	24,000	85	20,40,000	
Expenses (9,600+800-400)	10,000	85	8,50,000	
Debtors	9,600	90	8,64,000	
Creditors	6,400	90		5,76,000
Outstanding Expenses	800	90		72,000
Prepaid expenses	400	90	36,000	
Cash at Bank	2,400	90	2,16,000	
Head office Account		-		34,40,000
Difference in Exchange			11,58,000	
			2,04,08,000	**2,04,08,000**

Closing stock will be (16,000 × 90) = Rs. 14,40,000

Trading and Profit & Loss A/c
for the year ended 31st March, 2024

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Opening Stock	17,92,000	By Sales	1,63,20,000
To Purchases	20,40,000	By Closing Stock	14,40,000
To Goods from H.O.	98,52,000		
To Gross Profit	40,76,000		
	1,77,60,000		**1,77,60,000**

To Expenses	8,50,000	By Gross Profit	40,76,000
To Depreciation	3,60,000		
To Loss due to Exchange difference	11,58,000		
To Net Profit	17,08,000		
	40,76,000		40,76,000

Balance Sheet as on 31st March, 2024

Liabilities	Amount (Rs.)	Amount (Rs.)	Assets	Amount (Rs.)	Amount (Rs.)
Head Office			Fixed Assets	36,00,000	
Balance	34,40,000		Less: Depreciation	(3,60,000)	32,40,000
Add: Net Profit	17,08,000	51,48,000	Debtors		8,64,000
Outstanding expense		72,000	Cash at Bank		2,16,000
Creditors		5,76,000	Prepaid expenses		36,000
			Closing stock		14,40,000
		57,95,000			**57,95,000**

Working Notes :

Since England Branch is an integral foreign operation. Hence,

i) Fixed assets (cost and depreciation) are translated using the exchange rate at the date of purchase of the assets.

ii) Exchange difference arising on translation of the financial statement is charged to Profit and Loss Account.

Problem 8 :

Show Adjustment Journal Entry along with working notes in the books of head office situated at Tokyo (Japan) at the end of April, 2024 for incorporation of inter branch transactions assuming that only head office maintains different branch account in its books. The rate of exchange to be considered is 1 Rs. = 1.60 ¥.

a) Jalgaon Branch :

i) Received goods from Dhule Rs. 5,60,000 and Rs. 2,40,000 from Nandurbar.

ii) Sent goods to Bhusawal Rs. 4,00,000 and Nandurbar Rs. 3,20,000.

iii) Bill receivable received Rs. 3,20,000 from Bhusawal.

iv) Acceptances sent to Dhule Rs. 4,00,000 and Nandurbar Rs. 1,60,000.

b) Dhule Branch (Apart from the above) :

i) Received goods from Nandurbar Rs. 2,40,000 and Jalgaon Rs. 3,20,000.

ii) Cash sent to Jalgaon Rs. 2,40,000 and Nandurbar Rs. 1,12,000.

c) Bhusawal Branch (Apart from the above) :

i) Received goods from Nandurbar Rs. 4,80,000.

ii) Acceptances and cash sent to Nandurbar Rs. 3,20,000 and Rs. 1,60,000 respectively.

d) Nandurbar Branch (Apart from the above)

i) Sent goods to Bhusawal Rs. 5,60,000.

ii) Paid cash to Bhusawal Rs. 2,40,000.

iii) Acceptances sent to Bhusawal Rs. 2,40,000.

Solution :

Statement of Inter Branch Transaction Effects

Particulars	Jalgaon	Dhule	Bhusawal	Nandurbar
Jalgaon				
Received Goods	12,80,000	(8,96,000)	-	(3,84,000)
Sent Goods	(11,52,000)	-	6,40,000	5,12,000
Received Bills Receivable	5,12,000	-	(5,12,000)	-
Sent Acceptance	(8,96,000)	6,40,000	-	2,56,000
Dhule				
Received Goods	(5,12,000)	8,96,000	-	(3,84,000)
Sent Cash	3,84,000	(5,63,200)	-	1,79,200
Bhusawal				
Received Goods	-	-	7,68,000	(7,68,000)
Sent Cash and Acceptance	-	-	(7,68,000)	7,68,000
Nandurbar				
Sent Goods	-		8,96,000	(8,96,000)
Sent Cash	-		3,84,000	(3,84,000)
Sent Acceptances	-		3,84,000	(3,84,000)
	(3,84,000)	**76,800**	**17,92,000**	**(14,84,800)**

2. Journal Entry in the Books of Head office

Particulars	Dr. (Rs.)	Cr. (Rs.)
Dhule Branch A/c …… Dr.	76,800	
Bhusawal Branch A/c ……..…… Dr.	17,92,000	
To Jalgaon Branch A/c		3,84,000
To Nandurbar Branch A/c		14,84,800
(Being adjustment entry passed by HO for Inter Branch Transaction for April 2024)		

Problem 9 :

Konoyo & co. has **head office at Bejing China (C. N. Y.)** and **branch at Nagpur (India).** Nagpur branch furnishes you with its trial balance as on 31st March, 2024 and the additional information given thereafter :

Particulars	Dr.	Cr.
	Rupees in thousands	
Stock on 1st April, 2023	900	-
Purchases and sales	2,400	3,600
Sundry debtors and creditors	1,200	900
Bills of exchange	360	720
Wages and Salaries	1,680	-
Rent, rates and taxes	1,080	-
Sundry charges	480	-
Computers	720	-
Bank Balance	1,260	-
China Office A/c	-	4,860
	10,080	**10,080**

Additional Information :

a) Computers were acquired from a remittance of CN ¥ 18,000 received from, **China** head office and paid to the suppliers. Depreciate computers at **60%** for the year.

b) Unsold stock of Nagpur branch was worth Rs. **12,60,000** on 31st March **2024**.

c) The rates of exchange may be taken as follows :

i) On 01.04.2023 @ Rs. 11 per CN ¥

ii) On 31.03.2024 @ Rs. 13 per CN ¥

iii) Average exchange rate for the year @ Rs. 12 per CN¥

iv) Conversion in CN ¥ shall be made up two decimal accuracy.

You are asked :

To prepare in CN¥ the revenue statement for year ended 31st March, 2024 and the balance sheet as on that date of Nagpur branch as would appear in the books of China head office of Konoyo & co. You are informed that Nagpur branch account showed a debit balance of CN ¥ 3,62,125.87 on 31.03.2024 in China books and there were no items pending reconciliation.

Solution :

Konoyo & co.

Nagpur branch trial balance in (CN¥)

As on 31st March, 2024

Particulars	Conversion rate per CN¥ (Rs.)	Dr. CN¥	Cr. CN¥
Stock on 1.4.2023	11	81,818.18	-
Purchases and sales	12	2,00,000.00	3,00,000.00
Sundry debtors and creditors	13	92,307.69	69,230.77
Bills of exchange	13	27,692.31	55,384.62
Wages and salaries	12	1,40,000.00	-
Rent, rates and taxes	12	90,000.00	-
Sundry charges	12	40,000.00	-
Computers	-	18,000.00	-
Bank balance	13	96,923.08	-
China office a/c	-	-	3,62,125.87
		7,86,741.26	**7,86,741.26**

Trading and profit and loss account

For the year ended 31st March, 2024

Particulars	CN¥	Particulars	CN¥
To Opening stock	81,818.18	By Sales	3,00,000.00
To Purchases	2,00,000.00	By Closing stock	96,923.08
To Wages and salaries	1,40,000.00	By Gross loss c/d	24,895.10
	4,21,818.18		**4,21,818.18**
To Gross loss b/d	24,895.10	By Net loss	1,65,695.10
To Rent, rates and taxes	90,000.00		
To Sundry charges	40,000.00		
To Depreciation to computers (CN¥ 18000 x 60%)	10,800.00		
	1,65,695.10		**1,65,695.10**

Balance sheet of Nagpur Branch
As on 31st March, 2024

Liabilities	CN¥	CN¥	Assets	CN¥	CN¥
China office A/c	3,62,125.87		Computers	18,000	
Less : Net loss	1,65,695.10	1,96,430.77	Less : Depreciation	10,800	7,200.00
Sundry creditors		69,230.77	Closing stock		96,923.08
Bills payable		55,384.62	Sundry debtors		92,307.69
			Bank balance		96,923.08
			Bills receivable		27,692.31
		3,21,046.16			**3,21,046.16**

Note : The above answer has been given on the basis that the Nagpur branch is an integral foreign operation of Konoyo & co.

Problem 10 :

Sunder Ltd., Delhi have a **branch in Canberra Australia** At the end of 31st March, 2024 the following ledger balances have been extracted from the books of the Delhi Office and the Canberra Office :

Particulars	Delhi (Rs. Thousand)		Canberra (Austr. Dollars thousands)	
	Debit	Credit	Debit	Credit
Share Capital	-	40,00	-	-
Reserves & Surplus	-	20,00	-	-
Land	10,00	-	-	-
Buildings (Cost)	20,00	-	-	-
Building Dep. / Reserve	-	4,00	-	-
Plant and Machinery (Cost)	50,00	-	4,00	-
P & Mach Depreciation Reserve	-	12,00	-	2,60
Debtors / Creditors	5,60	400	1,20	60
Stock (01.04.2021)	2,00	-	40	
Branch Stock Reserve	-	8	-	-
Cash & Bank Balance	20	-	20	-
Purchase / Sales	4,80	10,40	40	2,46
Goods sent to Branch	-	2,00	10	-
Managing Director's Salary	60	-	-	-
Wages & Salaries	1,50	-	90	-
Rent	-	-	24	-
Office Expenses	50	-	36	-
Commission Receipts	-	5,12	-	2,00
Branch / H.O. Current A/c.	2,40	-	-	14
	97,60	**97,60**	**7,80**	**7,80**

The following information is also available :

1) Stock as at 31.3.2024.

Delhi	Rs.	3,00,000
Canbena	A$	6,250

2) Head Office always sent goods to the Branch at cost plus 25%.
3) Provision is to be made for doubtful debts at 5%.
4) Depreciation is to be provided on buildings at 10% and on plant and machinery at 20% on written down values.
5) The Managing Director is entitled to 2% commission on net profits.
6) Income – Tax is to be provided at 47.5%.

You are required :

a) To convert the Branch Trial balance into rupees :
(use the following rates of exchange :

Opening rate	1 A$	=	Rs. 54
Closing rate	1 A$	=	Rs. 56
Average rate	1 A$	=	Rs. 55
For fixed Assets	1 A$	=	Rs. 52

b) To prepare the trading and Profit & Loss Account for the year ended 31st March, 2024 showing to the extent possible H.O. results and Branch results separately. (Balance sheet not required)

Solution :

a) **Sunder Ltd. Canberra Branch Trial Balance (in Rupees)**

As on 31st March, 2024 **(Rs. '000)**

Particulars	Conversion rate per A $	Dr.	Cr.
Plant & Machinery (Cost)	Rs. 52	2,08,00	
Plant & Machinery Dep. Reserve	Rs. 52		1,35,20
Debtors. Creditors	Rs. 56	67,20	33,60
Stock (1.4.2021)	Rs. 54	21,60	
Cash & Bank Balances	Rs. 56	11,20	
Purchase / Sales	Rs. 55	22,00	1,35,30
Good received from H.O.	-	2,00	
Wages & Salaries	Rs. 55	49,50	
Rent	Rs. 55	13,20	
Office expenses	Rs. 55	19,80	
Commission Receipts	Rs. 55		1,10,00
H.O. Current A/c			2,40
		4,14,50	**4,16,50**
Exchange Loss (Balancing figure)		2,00	
		4,16,50	**4,16,50**

b) **Trading and Profit & Loss Account**

For the year ended 31st March 2024

(Rs. '000)

Particulars	H.O.	Branch	Total	Particulars	H.O.	Branch	Total
To Opening Stock	2,00	21,60	2,360	By Sales	10,40	1,35,30	1,45,70
To Purchases	4,80	22,00	2,680	By Goods sent to Branch	2,00	-	2,00
To Goods received from Head Office	-	2,00	200	By Closing Stock	3,00	3,50	6,50
To Gross profit c/d	8,60	93,20	10,180				
	15,40	**1,38,80**	**1,54,20**		**15,40**	**1,38,80**	**1,54,20**
To Wages & Salaries	1,50	49,50	5,100	By Gross Profit b/d	8,60	93,20	1,01,80
To Rent	-	13,20	1,320	By Commission Receipts	5,12	1,10,00	1,15,12
To Office Expenses	50	19,80	2,030				
To Prov for Debts @ 5%	28	3,36	364				
To Deprecation (as per working note – i)	9,20	14,56	2,376				
To Balance c/d	2,24	1,02,78	10,502				
	13,72	**2,03,20**	**21,692**		**13,72**	**2,03,20**	**2,16,92**

Particulars		Rs.	Particulars	Rs.
To Exchange loss		2,00	By Balance b/d	1,05,02
To Branch Stock Reserve (as per working note 2)		62		
To Managing Director's remuneration :				
Salary	60			
Commission	1,98	2,58		
(As per working note 3)				
To Provision for Income Tax (as per working note 4)		43,96		
To Balance c/d		55,86		
		1,05,02		**1,05,02**

Working Notes : **(Rs. '000)**

Note	Particulars	Head Office	Branch
1.	**Calculation of Depreciation :**		
	A. Building		
	Cost	20,00	-
	Less : Dep. Reserve	4,00	-
		16,00	-
	Depreciation @ 10%	**1,60**	**-**
	B. Plant & Machinery		
	Cost	50,00	2,08,00
	Less : Dep. Reserve	12,00	1,35,20
		38,00	72,80
	Depreciation @ 20%	**7,60**	**14,56**
	Total Depreciation (A + B)	**9,20**	**14,56**
2.	**Calculation of Branch Stock Reserve :**		
	Closing stock	3,50	
	Reserve on closing stock (350 x 1/5)		70
	Less : Branch Stock Reserve (as on 1.4.21)		8
	Additional Reserve Required		**62**
3.	**Calculation of Managing Director's Commission :**		
	Profit before adjustment		1,05,02
	Less : Provision for doubtful debts		3,64
			1,01,38
	Less : Branch stock reserve	62	
	Exchange loss	2,00	2,62
			98,76
	Profit (u/s 349 of the Companies Act, 1956)		
	Commission @ 2% = 198 (approx.)		
4.	**Calculation of provision for Income Tax:**		
	Profit (u/s 349 as computed above)		98,76
	Less : Provision for doubtful debts	3,64	
	Less : MD's remuneration	2,58	6,22
	Profit before tax		**92,54**
	Provision for tax @ **47.5% = 4,396**** (approx.)		**43,96**

Problem 11 :

The **Hira company** has a branch at **New York** Its Trial balance as 30th September, 2024 is as follows :

Particulars	Dr. US $	Cr. US $
Plant and Machinery	60,000	-
Furniture and Fixtures	4,000	-
Stock Oct. 01, 2023	28,000	-
Purchase	1,20,000	-
Sales	-	2,08,000
Goods from Indian Co. (H.O.)	40,000	-
Wages	1,000	-
Carriage inward	500	-
Salaries	3,000	-
Rent, rate and taxes	1,000	-
Insurance	500	-
Trade Expenses	500	-
Head Office a/c	-	57,000
Trade Debtors	12,000	-
Trade Creditors	-	8,500
Cash at bank	2,500	-
Cash in hand	500	-
	2,73,500	**2,73,500**

The following further information is given :

1) Wages outstanding - $ 500.
2) Depreciate Plant and Machinery and Furniture and Fixtures @ 10 per cent p.a.
3) The Head Office sent goods to Branch for Rs. 19,70,000.
4) The Head Office shown an amount of Rs. 21,50,000 due from Branch.
5) Stock on 30th September, 2024 - $ 26,000.
6) There were no in transit items either at the start or at the end of the year.
7) On September 1, 2023 when the fixed assets were purchased, the rate of exchange was Rs. 66 to one $.
   On October 1, 2023 the rate was Rs. 70 to one $.
   On September 30, 2024 the rate was Rs. 72 to one $.
   Average rate during the year was Rs. 71 to one $.

You are asked to prepare :

a) Trial balance incorporating adjustments given under 1 to 4 above. Converting dollars into rupees ;

b) Trading and Profit and Loss Account for the year ended 30th September, 2024 and Balance Sheet as on that date depicting the profitability and net position of the branch as would appear in India for the purpose of incorporating in the main balance sheet.

Solution :

a)

In the books of Hira Company

New York branch trial balance (in rupees)

As on 30th September, 2024

Particulars	Dr. US $	Cr. US $	Conversion rate	Dr. Rs.	Cr. Rs.
Plant and machinery	54,000		72	38,88,000	
Depreciation on plant and machinery	6,000		72	4,32,000	
Furniture and fixtures	3,600		72	2,59,200	
Depreciation on furniture and fixture	400		72	28,800	
Stock, October 1, 2023	28,000		70	19,60,000	
Purchase	1,20,000		71	85,20,000	
Sales		2,08,000	71		1,47,68,000
Goods from Indian co. (H.O.)	40,000			19,70,000	
Wages	1,500		71	1,06,500	
Outstanding wages	500		72		36,000
Carriage inward	500		71	35,500	
Salaries	3,000		71	2,13,000	
Rent, rates and taxes	1,000		71	71,000	
Insurance	500		71	35,500	
Trade expenses	500		71	35,500	
Head Office A/c		57,000			21,50,000
Trade debtors	12,000		72	8,64,000	
Trade creditors		8,500	72		6,12,000
Cash at bank	2,500		72	1,80,000	
Cash in hand	500		72	36,000	
Exchange gain (balance figure)					11,05,000
				1,86,35,000	**1,86,35,000**

b) New York branch trading and profit and loss account
For the year ended 30th September, 2024

Dr **Cr.**

Particulars	Rs.	Particulars	Rs.
To Opening stock	19,60,000	By Sales	1,47,68,000
To Purchase	85,20,000	By Closing Stock	
To Goods from head office	19,70,000	(26000 US $ x 72)	18,72,000
To Wages	1,06,500		
To Carriage inward	35,500		
To Gross profit e/d	40,48,000		
	1,66,40,000		**1,66,40,000**
To Salaries	2,13,000	By Gross profit b/d	40,48,000
To Rent, rates and taxes	71,000		
To Insurance	35,500		
To Trade expenses	35,000		
To Depreciation on plant and machinery	4,32,000		
To Depreciation on furniture and fixtures	28,800		
To Net profit c/d	32,32,200		
	40,48,000		**40,48,000**

Balance sheet of New York Branch
As on 30th September, 2024

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Head Office a/c	21,50,000		Plant and machinery	43,20,000	
Add : Net profit	32,32,200	53,82,200	**Less** : Depreciation	4,32,000	38,88,000
Foreign currency			Furniture and fixtures	2,88,000	
Translation reserve		10,69,000	**Less** : Depreciation	28,800	2,59,200
Trade creditors		6,12,000	Closing stock		18,72,000
Outstanding wages		36,000	Trade debtors		8,64,000
			Cash in hand		36,000
			Cash at bank		1,80,000
		70,99,200			**70,99,200**

Problem 12 :

The **Columbia branch of Happy Limited, Mumbai** sent the following trial balance as on 31st December, 2024.

Particulars	$	$
Head Office A/c	-	45,600
Sales	-	1,68,000
Debtors and Creditors	9,600	6,800
Machinery	48,000	-
Cash at bank	2,400	-
Stock, 1 January, 2024	22,400	-
Goods from H.O.	1,28,000	-
Expenses	10,000	-
	2,20,400	**2,20,400**

In the books of head office, the Branch a/c stood as follows :

Columbia Branch A/c

Particulars	Rs.	Particulars	Rs.
To Balance b/d	16,20,000	By Cash	57,52,000
To Goods sent to branch	58,52,000	By Balance c/d	17,20,000
	74,72,000		**74,72,000**

Goods are sent to the branch at cost plus 10% and the branch sell goods at invoice price plus 25% Machinery were acquired on 31st January, 2019 when $ 1.00 = Rs. 68.

Rates of Exchange were :

1st January, 2024 $ 1.00 = Rs. 74

31st December, 2024 $ 1.00 = Rs. 76

Average $ 1.00 = Rs. 75

Machinery is depreciated @ 10% and the Branch Manager is entitled to a commission of 5% on the profit of the branch.

You are required to :

i) Prepare the branch Trading & Profit & Loss A/c in dollars.

ii) Convert the Trial Balance of branch into Indian currency and prepare Branch Trading & Profit and Loss A/c and the Branch A/c in the books of head office.

Solution :

i) **In the Books of Head Office**

Branch Trading and Profit & Loss A/c (in Dollars)

For the year ended 31st December, 2024

Particulars	Rs.	Particulars	Rs.
To Opening stock	22,400	By Sales	1,68,000
To Goods from H.O.	1,28,000	By Closing stock (W.N.2)	16,000
To Gross Profit c/d	33,600		
	1,84,000		**1,84,000**
To Expenses	10,000	By Gross profit b/d	33,600
To Depreciation	4,800		
To Manager's Commission (W.N.1)	940		
To Net profit c/d	17,860		
	33,600		**33,600**

ii) **Converted Branch Trial Balance (into Indian Currency)**

Particulars	Rate per $	Dr. (Rs.)	Cr. (Rs.)
Machinery	68	32,64,000	-
Stock January 1, 2024	74	16,57,600	-
Goods from head office	Actual	58,52,000	-
Sales	75	-	1,26,00,000
Expenses	76	7,50,000	-
Debtors & creditors	76	7,29,600	5,16,800
Cash at bank	76	1,82,400	-
Head office A/c	Actual	-	17,20,000
Difference in exchange rate		24,01,200	-
		1,48,36,800	**1,48,36,800**
Closing stock $ 16,000 (W.N.2)	76		12,16,000

Branch Trading and Profit & Loss A/c

for the year ended 31st December, 2024

Particulars	Rs.	Particulars	Rs.
To Opening stock	16,57,600	By Sales	1,26,00,000
To Goods from head office	58,52,000	By Closing stock (W.N.2)	12,16,000
To Gross profit c/d	63,06,400		
	1,38,16,000		**1,38,16,000**

To Expenses	7,50,000	By Gross profit b/d	63,06,400
To Depreciation @ 10% on Rs. 32,64,000	3,26,400		
To Exchange difference	24,01,200		
To Manager's commission (W.N.1)	71,440		
To Net Profit c/d	27,57,360		
	63,06,400		**63,06,400**

Branch Account

Particulars	Rs.	Particulars		Rs.
To Balance b/d	17,20,000	By Machinery	32,64,000	
To Net profit	27,57,360	**Less :**		
To Creditors	5,16,800	Depreciation	3,26,400	29,37,600
To Outstanding Commission	71,440	By Closing stock		12,16,000
		By Debtors		7,29,600
		By Cash at bank		1,82,400
	50,65,600			**50,65,600**

Working Note :

1. **Calculation of manager's commission @ 5% on profit**

   i.e. 5% of $ [33,600 – (10,000 + 4,800)]

   Or 5% x $ 18,800 **= $ 940**

   Manager's commission in Rupees = $ 940 x Rs.76 = Rs. 71,440.

2.

Calculation of closing stock	**($)**
Opening stock	22,400
Add : Goods from head office	1,28,000
	1,50,400
Less : Cost of goods sold (at invoice price) i.e. $\frac{100}{125} \times 1,68,000$	1,34,400
Closing stock	16,000

Closing stock in Rupees = $ 16,000 x Rs. 76 = Rs. 12,16,000.

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: EXERCISES :

Answer the following in brief :

1. What do you mean by Foreign Branch?
2. What are different types of branches? What is the difference in accounting method of various branches?
3. Distinguish between Integral Foreign Operations and Non-Integral Foreign Operations.
4. Discuss the relationship between Head Office and Branch.
5. Short note on - Integral Foreign Operations.
6. Short note on - Non-Integral Foreign Operations.
7. How will you convert trial balance of a foreign branch into reporting currency of head office?
8. What are the features of Foreign Branch?
9. Which items are converted on the basis of opening exchange rate and closing exchange rate?
10. What is reporting currency as referred in foreign branch accounting?
11. What is foreign branch? What are the important rules for converting the figures of a foreign branch trial balance into home currency?
12. Write a brief note on AS 11 - The Effects of Changes in Foreign Exchange Rates (revised)
13. What is the treatment of exchange difference arising on conversion of trial balance of a branch into reporting currency?
14. Explain the steps for preparation of foreign branch final accounts for incorporating its results in head office books.

: UNSOLVED PROBLEMS :

Problem 1 :

On 31st March, 2024 the following Ledger balances have been extracted from the books of Netherland (Amsterdam) branch office :

Ledger A/c	Euro €
Building	7,20,000
Stock as on 1.4.2021	1,04,000
Cash and Bank Balances	2,28,000
Purchases	3,84,000
Sales	4,40,000
Commission receipts	1,12,000
Debtors	1,84,000
Creditors	2,60,000

You are required to convert above Ledger balances into Indian Rupees.

Use the following rates of exchange :

Opening Rate	1 € = 80
Closing Rate	1 € = 82
Average Rate.	1 € = 81
For Fixed Assets	1 € = 78

Problem 2 :

An **Indian Company Big Fish Ltd.** has a **Branch at Verginia (USA).** The Branch is a non-integral foreign operation of the Indian company. The trail balance of the branch as at 31st March, 2024 is as follows :

Particulars	Amount	US $
	Dr.	**Cr.**
Office Equipment	1,92,00,000	
Furniture and Fixtures	12,80,000	
Stock (April 1, 2023)	89,60,000	
Purchases	3,84,00,000	
Sales	-	6,65,60,000
Goods sent from H.O.	1,28,00,000	
Salaries	12,80,000	
Carriage inward	1,60,000	
Rent, Rates & Taxes	3,20,000	
Insurance	1,60,000	
Trade Expenses	1,60,000	
Head Office Account	-	1,82,40,000
Sundry Debtors	38,40,000	
Sundry Creditors	-	27,20,000
Cash at Bank	8,00,000	
Cash in Hand	1,60,000	
	8,75,20,000	**8,75,20,000**

The following further information are given :

i. Salaries outstanding $ 1,60,000

ii. Depreciate office equipment and Furniture & Fixture @ 10% p.a. at written down value.

iii. The Head Office sent goods to Branch for Rs. 63,20,00,000

iv. The Head Office shown an amount of Rs. 82,00,00,000 due from branch.

v. Stock on 31st March, 2024 is $ 86,00,000

vi. There were no transit items either at the start or at the end of the year.

vii. On April 1, 2022 when the fixed assets were purchased the rate of exchange was Rs. 67 to one $. On April 1, 2023, the rate was Rs. 70 per $. On March 31, 2024 the rate was Rs. 78 per $. Average Rate during the year was Rs. 74 to one $.

Prepare :

a) Trail balance incorporating adjustment given converting dollars in to rupees.

b) Trading, profit and Loss Account for the year ended 31st March, 2024 and Balance Sheet as on date depicting the profitability and net position of the Branch as would appear in the books of Indian Company Big Fish Ltd. for the purpose of incorporating in the main Balance Sheet.

Problem 3 :

M/s Akkad Bakkad Co. has **head office at Manchester (United Kingdom)** and **branch in Delhi (India).** Delhi branch is an integral foreign operation of M/s Akkad Bakkad & Co. Delhi branch furnishes you with its trial balance as on 31st March, 2024 and the additional information given there after:

Particulars	Dr. (Rs)	Cr. (Rs)
Stock on 1stApril, 2023	6,00,000	-
Purchases and Sales	16,00,000	24,00,000
Sundry Debtors & Creditors	8,00,000	6,00,000
Bills of Exchange	2,40,000	4,80,000
Wages & Salaries	11,20,000	-
Rent, Rates & Taxes	7,20,000	-
Sundry Charges	3,20,000	-
Computers	4,80,000	-
Bank Balance	8,40,000	-
Manchester Office A/c	-	32,40,000
	67,20,000	**67,20,000**

Additional Information :

a) Computers were acquired from a remittance of British Pound Sterling £ 12,000 received from Manchester (United Kingdom) head office, and paid to the suppliers. Depreciate computers at 60% for the year.

b) Unsold stock of Delhi branch was worth Rs. 16,80,000 on 31st March,2024.

c) The rates of exchange may be taken as follows :

- On 01.04.2023 @ Rs. 110 per British Pound Sterling £
- On 31.03.2024 @ Rs. 120 per British Pound Sterling £
- Average exchange rate considered for the year @ Rs. 116 per British Pound Sterling £
- Conversion in £ shall be made up to two decimal accuracy.

You are asked to prepare in per British Pound Sterling £ the revenue statement for the year ended 31st March, 2024 and the balance sheet as on that date of Delhi branch as would appear in the books of Manchester (United Kingdom) head office of Akkad Bakkad & Co. You are informed that Delhi branch account showed a debit balance of per British Pound Sterling £ 1,19,381.40 on 31.3.2024 in Manchester (United Kingdom) books and there were no items pending reconciliation.

Problem 4 :

Commando Ltd. Amalner has a branch in Chicago USA, which is an integral foreign operation of the company. At the end of 31st March, 2024. The following ledger balances have been extracted from the books of the Amalner office and the Chicago Branch:

Particulars	Amalner (Rs.)		Chicago ($)	
Share Capital		25,00,000		
Reserve and Surplus		18,80,000		
Land	9,50,000			
Building (cost)	20,00,000			
Buildings Depreciation Reserve		4,00,000		
Plant & Machinery (cost)	40,00,000		2,00,000	
Plant & Machinery Depreciation Reserve		10,00,000		40,000
Trade receivables / payables	10,00,000	5,40,000	1,20,000	40,000
Stock (01-4-2023)	5,00,000		50,000	
Branch Stock Reserve		1,30,000		
Cash & Bank Balances	2,50,000		8,000	
Purchases / Sales	5,50,000	12,00,000	50,000	2,50,000
Goods sent to Branch		30,00,000	60,000	
Managing Director's salary	1,00,000			
Wages & Salaries	2,00,000		36,000	
Rent			12,000	

Office Expenses	50,000		24,000	
Commission receipts		5,50,000		2,00,000
Branch / H.O. Current A/c	16,00,000			30,000
	1,12,00,000	**1,12,00,000**	**5,60,000**	**5,60,000**

The following information is also available :

i) Stock as at 31/03/2024.
Amalner : 4,00,000
Chicago : $ 20,000 (all stock received from Amalner)

ii) Head office always sent goods to the Branch at cost plus 25%.

iii) Provision is to be made for doubtful debts at 5%.

iv) Depreciation is to be provided on Buildings at 10% and on Plant and Machinery at 20% on written down values.

You are required :

a) To convert the branch Trial Balance into rupees, using the following rates of exchange :
Exchange :

Opening rate	1 $ = Rs. 70
Closing rate	1 $ = Rs. 76
Average rate	1 $ = Rs. 73
For fixed assets	1 $ = Rs. 70

b) To prepare the Trading and Profit & Loss Account for the year ended 31st March, 2024, showing to the extent possible, Head Office results and Branch results separately.

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CHAPTER 5

Double Accounts System and Financial Statements of Electricity Companies

5.1 Double Accounts System

5.2 Meaning, Features, Advantages and Limitations of Double Accounts System

5.3 Revenue Account, Net Revenue Account, Capital Account and Balance Sheet under the Double Accounts System

5.4 Financial Statements of Electricity companies

5.5 Presentation of Financial Statements of Electricity companies in accordance with the requirements of Schedule III under the Companies Act, 2013. Refer to the provisions of the Electricity Act, 2003

5.1 Double Accounts System :

Public utility concerns in India are required to prepare their accounts under the Double Account System. The Double Account System is merely a way of presentation of final accounts. It should not be confused with the Double Entry System which is the basis of maintaining books of account. Up to the preparation of the trial balance, there is no difference between the Double Account System and the ordinary system. Only when it comes to preparation of the Balance Sheet and the Revenue Account that there is a difference.

Electricity Company accounts are prepared by following the double accounting system. Accounts are made on Double Accounting System because a Public Utility company cannot invest in fixed Assets until & unless it arranges for some long term liabilities. In other words such companies cannot use its short-term fund for financing fixed assets.

Differences between the double entry system and double account system

Double Entry System	Double Account System
Objective	
The objective of preparing the balance sheet under the double-entry system is to disclose the financial position of the business on a particular date.	The main objective of preparing the balance sheet under double account system is in two parts and prepares the balance sheet to give the details regarding the fixed capital raised and its utilization in purchasing fixed assets
Preparation of annual accounts	
Here business concerns prepare their accounts to consist of Profit and loss account Profit and loss appropriation account Balance sheet	Under double account system, the public utility concerns prepare their annual accounts to consist of Revenue account Net revenue account Receipts and expenditure on capital account General balance sheet
Record of Accounts	
Under the double-entry system, fixed assets and fixed liabilities are recorded in the balance sheet.	Under the double account system, fixed assets and fixed liabilities are recorded in the capital account.

Deduction of Depreciation	
Depreciation is deducted from the concerned asset in the balance sheet.	The fixed assets are shown at their cost in the capital account. The depreciation fund is shown in the general balance sheet.

5.2 Meaning, Features, Advantages and Limitations of Double Accounts System:

Meaning : The Double Account System is a method of presenting the annual final accounts/annual financial statements of public utility undertakings, like Railways, Electricity, Gas, Water Supply, Tramways etc. These undertakings are usually incorporated under Special Acts and, as a result, the form of accounts is prescribed by, special statute. These public utility undertakings are generally run by Government or by local authorities (except Electric Supply Companies and Tramways).

It should be remembered that accounts of Industrial undertakings, other than Railways and Electric Supply, are prepared as per Indian Companies Act, 1956. The object of this system is not to show the financial position at a particular date but to disclose how the capital is being raised and the application of the same, in the acquisition of different fixed assets. For this purpose two-chamber Balance Sheet is prepared the first part being Receipts and Expenditure on Capital Account and the second part being the General Balance Sheet.

Main Features of Double Account System:

(a) Generally, a public utility undertaking needs a large amount of capital which is invested in the acquisition of fixed assets. Therefore, fixed assets, fixed liabilities and current assets, current liabilities are to be separately dealt with. Fixed Assets and fixed or long-term liabilities are recorded in Receipts and Expenditure on Capital Account. Similarly, current assets and current liabilities are recorded in the General Balance Sheet.

(b) Revenue Account and Net Revenue Account are prepared instead of Profit and Loss Account and Profit and Loss Appropriation Account.

(c) Normally, no adjustment of asset is made in the Capital Account.

(d) Depreciation is not deducted from the asset concerned but the same is shown as a liability by way of a fund. And, as such, fixed assets are recorded at book value.

(e) Any kind of funds and reserve — e.g., Sinking Fund, Depreciation Fund, General Reserve, Capital Reserve, the Balance of Revenue/Net Revenue Account — are shown in the liabilities side of the General Balance Sheet.

(f) Discount and Premiums are permanently treated as capital items.

(g) Loan capital (debentures) Shares and Stocks are treated as capital items.

(h) Interest on Loan and Debentures (i.e., all fixed interests) are to be charged against Net Revenue Account.

Advantages of Double Account System:

(a) As Depreciation fund is compulsorily created and invested in outside securities, it helps to replace an asset without affecting the liquid resources, viz., Cash, of the concern.

(b) Revenue account represents the operating activities which expresses the operating result of the undertaking while extraneous items are recorded on Net Revenue Account which expresses the real operational result.

(c) The capital account helps us to understand the source of capital in various forms and the application of same in the form of various fixed assets. Thus, it can easily be followed by an ordinary person.

(d) Since these concerns enjoy almost monopoly rights given by the Govt., the Govt., may understand whether the concern supplies the efficient service at reasonable cost or not after analysing its prescribed format of accounting.

(e) The undertakings may compile at ease various statistical returns which reflect the service given to the public since the accounts are published in a standardised form.

Disadvantages of Double Account System:

(a) Capital Account incorporates the value of an asset whose life is very short. Those assets appear in the account at their scrap value—although these are shown at a higher value.

(b) Since all Assets are recorded at cost and not the written-down value, the Balance Sheet does not exhibit a real position.

(c) Capital account includes the items like preliminary expenses which are also considered in Single Account System.

(d) It is not always possible to understand the accounting statements and forms by the ordinary people.

(e) In order to replace an asset for improved means it may not always be possible to determine exactly the amount of revenue expenditure items which should be charged.

(f) Since repairs and renewal expenditures are charged to revenue account of the same year, profit of the undertaking, particularly on that year when no expenditures on repairs and renewals are incurred, is affected. That is why, in order to overcome this difficulty, some undertakings may even open a separate account viz., Repair and Renewal Reserve.

(g) Proper distinctions between revenue expenditure and capital expenditure is not possible under this system.

5.3 Revenue Account, Net Revenue Account, Capital Account and Balance Sheet under the Double Accounts System :

The following points highlight the four components in preparation of final accounts under double account system. The components are:

- Revenue Account
- Net Revenue Account

- Capital Account
- General Balance Sheet.

Revenue Account : This account is similar to the Profit and Loss Account of a trading or manufacturing concern. It corresponds with the ordinary Profit and Loss Account (prepared under Single Account System) where the expenses are grouped under appropriate heading. It is debited with various items of expenses and credited with various items of incomes. Depreciation on fixed assets is charged by debiting the Revenue Account and crediting the Depreciation Fund Account.

Generally, expenses are shown under the following broad headings:

- Generation
- Distribution
- Public Lamps
- Rent, Rates and Taxes
- Management Expenses
- Law Charges
- Depreciation
- Special Charges

Similarly, incomes are grouped as:

- Sale of energy for lighting
- Sale of energy for power
- Sale of energy under special contracts
- Public lightings
- Rental of meters
- Rent receivable
- Transfer fees, etc.

Statutory Form of Revenue Account under is given below :

Revenue Account for the year ended ……

Particulars	Rs.	Particulars	Rs.
(A) Generation		By Sale of energy for lighting	
To Fuel		By Sale of energy for power	
To Oil wastage, water		By Sale of energy under special	
To Salary of engineers		contracts	
To Wages and gratuities		By Public lighting	
To Repairs and maintenance		By Rental of meters	
(B) Distribution		By Rent receivables	
To Salary of engineer		By Transfer fees	
To Wages and gratuities		By Other items	
To Repairs		By Miscellaneous receipts	

(C) Public Lamps To Attendance and repairs To Renewals (D) Rent, Rates and Taxes To Rents payable To Rates and taxes (E) Management Expenses To Director's remuneration To Management To General establishment To Auditor of the company (F) Law charges To Law changes (G) Depreciation To Lease To Buildings To Plant To Mains To Meters, etc. (H) Special charges To Bad Debts		By Sale of ashes By Reconnection and disconnection fees	

Net Revenue Account : This is similar to the Profit and Loss Appropriation Account of a trading or manufacturing concern except the treatment of interest on debentures and loans. In the Net Revenue Account, it is treated as appropriation of profits. However, In ordinary cases, such interest is treated as a charge against profits and shown in the Profit and Loss Account. Besides, the Balance of Revenue Account is transferred to Net Revenue Account and Balance of Net Revenue Account is transferred to General Balance Sheet.

The Statutory form of Net Revenue Account is given below:

Net Revenue Account for the year ended …….

Particulars	Rs.	Particulars	Rs.
To Balance from last year's A/c To Interest on loan To Contingency reserve To Interest on debentures To Dividends To Balance carried to General Balance Sheet		By Balance from last years A/c By Balance brought from Revenue Account By Interest on Bank Account By Balance carried to General Balance Sheet	

Capital Account (Receipts and Expenditure on Capital Account) :

The main purpose of this account is to show total amount of capital raised and its application for acquisition of fixed assets for carrying on the business. As per the statutory forms (prescribed by the Indian Electricity Act) there are three columns on each side:

- One showing balance at the end of the previous year
- Disclosing the amount received/spent during the year
- Balance at the end of the year. Statutory form of Capital Account under

It is also known as Receipts and Expenditure on Capital Account. The purpose of this account is to show the sources of total capital and the application of the same in different fixed assets. It contains expenditure of a capital in the left hand side (or debit side) including additions to fixed assets. Three columns are generally used for the purpose, the first column shows the expenditure on each item at the end of last year, the second one shows the additions which are made for the current year, and the third column represents the total capital expenditure to date.

On the other hand, the right hand side (or credit side) reveals the receipts on capital account including amount received from public for shares and debentures including the amount of fixed loans, if any. Premium received on shares and debentures or any calls paid in advance are also to be added and Calls-in-arrear is to be deducted. Three columns are also used—the first column shows the receipts on each item at the end of last year, the second column shows the receipts for the current year and the third column represents the total capital receipts to date.

The balance of Receipts and Expenditure on Capital Account is carried down and shown in the respective side of the General Balance Sheet or, the total of two sides of this account are shown on both sides of the General Balance Sheet. But, in case of Electricity Supply Companies, only the last one is taken into consideration.

Note : Preliminary expenses spent on the formation of an undertaking., Premium received on issue of shares and Debentures are treated as capital expenditure and, hence, will appear in the debit side and credit side, respectively, of capital account.

Receipts and Expenditure on Capital Account for the year ended……

Expenditure	Expenditure up to and of previous year (Rs.)	Expenditure during the year (Rs.)	Total Expenditure (Rs.)	Receipts	Receipts up to the and of previous year (Rs.)	Receipts during the year (Rs.)	Total receipts (Rs.)
To Preliminary Expenses				By Ordinary shares			
To Land				By Preference shares			
To Building				By Debentures			
To Plant				By Loans			
To Mains				By calls in			

To Transforms motors, etc. To Motors To General stores To Special items Total Expenditure To Balance of Capital A/c Carried to General Balance Sheet				advance By Other receipts Total Receipts By Balance of Capital A/c carried to General Balance sheet			

General Balance Sheet : In the General Balance Sheet, all the remaining assets and liabilities. This is actually the second part of the Balance Sheet which contains current assets and current liabilities together with the balance or totals of each side (as the case may be) of capital account. Certain other items, e.g., any kind of reserve, say, General Reserve, Capital Reserve etc., or any kind of funds, e.g., Depreciation Fund, etc., also will appear in the Balance Sheet. The assets are recorded in the right hand side (asset side) and liabilities are recorded in the left hand side (liabilities side), i.e., it is prepared in its usual form.

The Statutory Form of General Balance Sheet under Indian Electricity Act is given below:

General Balance Sheet as on ……..

Particulars	Rs.	Particulars	Rs.
To Capital Account To Sundry Creditors for Capital Expenditure To Sundry Creditors on Open A/c To Net Revenue A/c To Reserve Fund To Depreciation Fund By Special Items		By Sundry Debtors By Preliminary expenses By Securities By Special By Cash at Bank By Capital A/c By Stores in hand	

5.4 Financial Statements of Electricity companies:

Treatment of Replacement of an Asset :

Under the Single Account System when an asset is replaced, the Cash Account is debited and the Asset Account is credited, and the difference is transferred to the Profit and Loss Account (being profit or loss on sale of asset). The Asset Account is reduced by its written down value.

Similarly, when an asset is purchased, the Asset Account is debited and the Cash or Bank Account is credited and the Asset Account is increased by that amount. However, under the Double Account System when an asset is replaced, the original cost of the asset is not disturbed, instead it continues to appear in the Capital Account at the old figure. Under this system, the cost of replacement is treated in the books of accounts as under:

i. **When no Extension or Improvement is involved:** In this case, the entire amount of cost of replacement is treated as revenue expenditure and is debited to Revenue Account.

ii. **When Extension or Improvement is Involved:** In this case, an amount equal to the present cost of replacement of the old asset is treated as revenue expenditure and is charged to the Revenue Account. However, this chargeable amount is reduced by -
   - sale proceeds of scrap of the old asset
   - value of materials of old asset used in rebuilding the new asset.

The total cost of replacement plus the value of materials of old asset used in rebuilding the new asset minus the present cost of replacement of the old asset is capitalised.

Some Important Provisions : The students should note the following important matters which will affect the accounts of electricity companies as provided in the Sixth Schedule to The Electricity (Supply) Act. 1948.

These are as follows:

- Depreciation on fixed assets
- Fixed assets and their prescribed life
- Contingency reserve
- Development reserve
- General reserve
- Appropriation of profits

Depreciation on Fixed Assets : As per the provision of Sec. of The Electricity (Supply) Act, 1948, every fixed asset must be depreciation and for calculating depreciation, the life of each asset is to be taken as stated in the Seventh Schedule. Schedule VI provides for two methods of depreciation, viz:

1. **Compound Interest Method :** Under this method, such an amount should be set aside annually as depreciation throughout the prescribed life of the asset concerned, as would, with 4% p.a. compound interest, produced by the end of the prescribed period an amount equal to 90% of the original cost of the asset.
2. **Straight Line Method :** Under this method, the depreciation is calculated by dividing 90% of the original cost of the asset by the prescribed period in respect of such an asset. All sums credited to the Depreciation Reserve may be invested either in the business or

may be utilised for repayments of loans not guaranteed under Section or for repayment of sums paid by the State Government under Guarantee Assets Written Down to 10% of Cost and No depreciation is allowed in respect of an asset which has been written-down to 10% (or less) of its original cost.

When a fixed asset is discarded or becomes obsolete it cannot be depreciated any more. In this case, the written-down value of such an asset is transferred to a special account. Any profit on sale of such assets is transferred to the Contingency Reserve Account.

Contingencies Reserve: Every electricity supply company is required to maintain a Contingencies Reserve. A sum equal to not less than 1/4% or not more than 1/2% of the original cost of fixed assets must be transferred from the Revenue Account to the Contingencies Reserve. The maximum amount in this account must not exceed 5% of the original cost of the fixed assets. The amount of Contingencies Reserve must be invested in trust securities. With the prior approval of the State Government, the Contingencies Reserve can be utilised for the following purposes:

- For meeting expenses or loss of profit due to accident, strikes or circumstances beyond the control of the management;
- For meeting expenses on replacement or removal of plant or works other than expenses required for normal maintenance or renewals;
- For paying compensation under any law for the time being in force and for which no other provision has been made.

Development Reserve : An amount equal to income tax and super tax saved on account of Development Rebate allowed under Income Tax Act, 1961 has to be transferred to the Development Reserve Account. If, in any accounting year, the clear profit without considering special appropriations plus balance in the credit of Tariffs and Dividend Control Reserve is less than the required amount of Development Reserve, the shortfall may not be made good. In case of sale of the undertaking, this reserve should be handed over to the buyer.

General Reserve : Section of the Electricity Act, 1948 provides for the creation of the General Reserve by making appropriation from the Revenue Account after charging interest and depreciation. The amount of contribution shall be calculated @ 1/2% of the original cost of the fixed assets until the total of such reserve comes to 8% of the original cost of the fixed assets. Tariffs and Dividend Control Reserve

It is created out of the disposable surplus of the electricity company. This reserve can be utilised whenever the clear profit is less than reasonable return. At the time of sale of the undertaking, this reserve should be handed over to the buyer.

Appropriation of Profits : The Electricity (Supply) Act, 1948 provides that an electricity company cannot charge any rate as they like. They are entitled to charge such rates which give them a reasonable return. They must so adjust the rate that the amount of clear profit in any year

does not exceed the reasonable return by more than 20%. Disposal of Surplus The excess of clear profit over reasonable return to the extent of 20% of reasonable return has to be disposed of as under: (Any excess over 20% of reasonable return must be refunded to customers).

- 1/3 of the surplus (not exceeding 5% of reasonable return) at the disposal of the undertaking.
- Of the balance, 1/2 is to be transferred to the Tariffs and Dividend Control Reserve.
- The balance is to be transferred to the Consumer's Rebate Reserve for reduction of rates or for special rebate.

Calculation of Clear Profit : The Clear profit is the difference between the total income and total expenditure plus specific appropriations. The Clear profit is calculated as follows:

(A) Income from :

- Gross receipts from sale of energy, less discount
- Rental of meters and other apparatus hired to customers
- Sale and repair of lamps and apparatus
- Rent, less outgoings not otherwise provided for
- Transfer fees
- Interest on investments, fixed and calls deposits and bank balances
- Other taxable general receipts

Total Income

(B) Expenditure:

- Cost of generation and purchases of energy
- Cost of distribution and safe of energy
- Rent, rates and taxes (other than taxes on income profits)
- Interest on load advanced by Board
- Interest on loan taken from organization or institutions approved by the State Government
- Interest on debentures issued by the licensee
- Interest on security deposits
- Legal charges
- Bad debts
- Auditor's fees
- Management expenses
- Depreciation (as per Schedule Seventh)
- Other admissible expenses

- Contribution to Provident Fund; gratuity, staff pension and apprentice and other training schemes
- Bonus paid to the employees of the Undertaking. In case of dispute, in accordance with the decision of the tribunal.

In any other case, with the approval of the State Government Total Expenditure

Balance (A – B)

Less : Specific Appropriations :

- Past losses (i.e., excess of expenditure over income)
- All taxes on income and profits
- Amount written-off in respect of fictitious and intangible assets
- Contribution to Contingency Reserve
- Contribution towards arrears depreciation (if any)
- Contribution to Development Reserve
- Other appropriation (special) permitted by the State Government

Clear Profit

Reasonable Return: It means the sum of the following items:

- An amount calculated at (bank rate + 2%) on Capital Base as defined below.
- Income from investments (except income from Contingency Reserve Investment).
- An amount equal to 1/2% on loans advanced by the State Electricity Board.
- An amount equal to 1/2% on the amounts borrowed from organisations or institutions approved by the State Government.
- An amount equal to 1/2% on the amount raised through issue of debentures.
- An amount equal to 1/2% on the balance of Development Reserve.
- Any other amount as may be permitted by the Central Government.

Capital Base : Capital Base means :

- Original cost of fixed assets available for use Less : Contribution, if any, made by the customers for construction of service lines
- the cost of intangible assets
- the amount of investments made compulsorily on account of contingencies reserve
- the original cost of work-in-progress
- working capital which is equal to the sum of:

(a) 1/2 of the sum of stores, materials and supplies including fuel on hand at the end of each month of the accounting year;

(b) 1/ 2 of the sum of cash and bank balance and call and short term deposit at the end of each month of accounting year but does not exceed in aggregate an amount equal to 1/4 of the expenditure.

Deduct

- Accumulated depreciation on tangible assets and amounts written-off tangible assets Loan advanced by Electricity Board.
- Security deposits of customers held in cash.
- Debentures issued by the undertaking.
- Amount standing to the credit of Tariffs and dividend control revenue.
- Loan borrowed from organisations or institutions approved by the State Government.
- Balance of Development reserve.
- Amount carried forward for distribution to consumers.

Capital Base

5.5 Presentation of Financial Statements of Electricity companies in accordance with the requirements of Schedule III under the Companies Act, 2013. Refer to the provisions of the Electricity Act, 2003:

The Electricity Act, 2003:

The Act has been enacted to replace Indian Electricity Act, 1910, The Electricity Supply Act, 1948, The Electricity Rules 1956 and the Electricity Regulatory commissions Act, 1998.

The main purpose of the Act is to:

- To distance state Electricity Boards from tariff determination.
- To reduce/remove government subsidies & to make electricity companies self sustainable.
- To bring private participation in this area.
- To bring in competition

Licensing: No licence required for power generation except for hydro power projects over a certain size but licence is required to

- transmit electricity, or
- distribute electricity or
- to do trading in electricity.

The authorities under the Act are :

- Central Electricity Authority (CEA)
- Central Electricity Regulatory Commission &
- State Electricity Regulatory Commission.

Tariffs: Tariffs are fixed by the appropriate commissions considering various factors including safeguarding interest of consumer and at the same time recovery of cost of electricity

and providing a reasonable return on investment. For tariff determination under the Act two regulations have been issued Regulation 2004 & Regulation 2009.

Security Deposit : Electricity company can take suitable Security Deposit from consumers for supply of Electricity and/or for providing electric line, meter etc. This is refundable deposit.

Entry: Cash / Bank a/c ……Dr.

To Security Deposit a/c

This will be shown under non-current liability in Balance sheet.

Interest : Electricity company has to pay interest at Bank Rate or more (rate prevailing on 1st April of the year) on such deposit. Interest is accrued annually.

Entry: Interest Expense a/c …… Dr.

To Interest Accrued on Security Deposit a/c –

This accrued interest will be adjusted against the consumers bill for the 1st quarter of next year.

Entry: Interest Accrued on Security Deposit a/c …… Dr.

To Electricity Sale a/c

Accrued interest will be shown under current liability in balance sheet.

Illustration 1.

Security deposit received from a customer on 1.7.2022 Rs.2,00,000 RBI interest Rate on 1.4.2022 was 8% and on 1.4.23 9%. Account this for the year 2022-23 & 2023-24.

Solution: Accounting for security deposit and Interest on it.

	Particular	Debit	Credit
1.7.2022	**Year 2022-23**		
	Bank A/c Dr.	2,00,000	
	To Security Deposit		2,00,000
	(Security deposit received from consumers)		
31.3.2023	Interest A/c Dr.	12,000	
	To Accrued interest A/c		12,000
	2,00,000 X 8% X $\frac{9}{12}$ = 12,000		
	(Interest accrued on Security deposit from consumers)		
	Year 2023-24		
30.06.2023	Accrued interest A/c Dr	12,000	
	To Electricity Sale A/c		12,000
	(Accrued Interest on security deposit adjusted against electricity bills of consumers)		

31.03.2024	Interest A/c Dr	18,000	
	To Accrued interest A/c		18,000
	2,00,000 X 9% X $\frac{12}{12}$ = 18,000		
	(Interest accrued on Security deposit from consumers)		
	Year 2024-25		
30.06.2024	Accrued Interest A/c Dr	18,000	
	To Electricity Sale A/c		18,000
	(Accrued Interest on security deposit adjusted against electricity bills of consumers)		

Capital Service line contribution (Customers contribution for service line)

An Electricity company can collect such charges for providing electricity connection and/or transformers at new areas as per rules framed by State Electricity Regulatory Commission.

Entry: Cash / Bank a/c ……..Dr.

To Customers Contribution for service line

This will be shown under capital reserve in Reserves & Surplus in the balance sheet.

This amount shall be amortised in profit and loss account in proportion to the depreciation provided on the concerned asset.

Entry: Customers Contribution for service line a/c ……. Dr.

To Profit & Loss a/c

Accelerated Power Development and Reforms Program (APDRP):

Central government introduced this program to improve distribution network, reduce/avoid transmission & distribution losses, theft etc.

This has two components:

- **Investment Components:** That is for capital expenditure purposes. It has grant & loan component.

  In special category states, 100% of the project cost is provided, 90% in grant form and 10% in loan form.

  In other states, 50% of the project cost is provided of which half (i.e. 25%) is grant and other half (i.e. 25%) is loan
- **Incentive component:** This is provided to motivate states to reduce their cash losses (calculated with reference to base year of 2000-01. Upto 50% of cash loss reduction is provided and is in the form of grant.

- **Accounting for loan component:** Loan component will be accounted as usually and will be treated as long term borrowings. Interest will be recognized at the applicable rates and will be treated as revenue expense.
- **Accounting for Grant Component:** Grant under APDRP received as incentive component for reduction in cash los should be recognized in profit & loss account.

  Entry: Bank a/c …….. Dr. --

  To Profit & Loss a/c (grant as incentive for reduction in cash losses)--

  Grant received for capital expenditure shall be treated as capital receipt and should be shown under Capital Reserve in Reserves & Surplus in Balance sheet.

  Entry : Bank a/c …….. Dr. --

  To Capital Grant under APDRP a/c

  This grant should be amortised to profit & loss account in proportion to the depreciation charged on the respective assets.

  Entry : Capital Grant under APDRP a/c ……Dr. --

  To Profit & Loss a/c--

Note: In cash flow statement such grant & customers contribution for service line (as discussed earlier) shall be shown under financing activity.

Illustration 2 :

An Electricity company has incurred Capital Expenditure of Rs.200 lakhs having life of 10 years. This is partly financed as 45% of Cost contributed by consumer and 35% is grant from central government. Account this transactions and their amortization. Salvage value is 10 % as per regulation.

Solution: Amortization of Consumer contribution and Govt. grant for capital expenditure.

Cost of Asset	200	Life : 10 year
(–) Salvage value	20	
Depreciable amount	180	
Depreciable p.a.– 190 / 10 =	18	
Consumer Contribution	90	
Government grant	70	

Write off / amortization of Consumers Contribution and Government grant in proportion to depreciation:

Consumers contribution	90 / 10 = 9.00 p.a
Government grant	70 / 10 = 7.00 p.a.

(Amount in Lakhs)

Particular		Debit	Credit
Bank A/c	Dr	160	
To Contribution from Consumer for service line A/c			90
To Government grant A/c			70
(For capital expenditure, 40% Contribution received from Consumers and 25% grant from govt.)			
Plant & Machinery A/c	Dr	200	
To Bank A/c			200
(Plant and machinery acquired)			
Every year – year 1 to 10			
Depreciation A/c	Dr	18	
To Plant & Machinery/Depreciation Provision A/c			18
(Depreciation charged)			
Consumers Contribution A/c	Dr	9	
Government grant A/c	Dr	7	
To Profit and Loss A/c			16
(Consumers contribution and Govt. grant amortised in proportion to the depreciation charged on the concerned assets)			

Depreciation:

- Regulation 2009 provides following with regard to the depreciation:
- Rates shall be determined by Central Electricity Regulatory Commission.
- This rates shall be followed for tariff as well as for accounting.
- Depreciation will be by SLM (Straight Line Method)
- Salvage Value of at least 10% will be considered i.e. maximum 90% of the cost will be written off over the useful life of the asset.
- Depreciation will be charged on Historical Cost & not on Revalued value.
- Depreciation will be charged on time proportion basis & will start when the asset is put to use
- If allows optimized Depreciated Replacement Cost (ODRC) i.e. if asset is financed by loan component then depreciation equal to the principle loan repayment in each year will be provided until the repayment of loan, remaining depreciable balance thereafter will be written off over remaining useful life on SLM.

- Commission has considered 12 years repayment period of loan & accordingly has given rates. After repayment of loan the balance depreciable value shall be divided over remaining useful life.

Summarised / Grouped Depreciation Rates are as follows

A.	Land Owned	0 %
B.	Land Leased	3.34 %
C.	Building & Civil Engineering works	3.34 %
D.	Plant & Machinery in generating stations, Cooling tower & circulating water systems, Hydraulic works, Transformers, substation equipments, switchgear including Cable connections, Lightning arrestor, Batteries, overhead lines, Meters,	5.28 %
E.	AC plant-static, Street Light fittings, asset not covered anywhere else. Office furniture, office Equipment, Internal wiring, Motors given on hire,	6.33 %
F.	Communication equipment Self propelled vehicles, AC plant-portable, Apparatus on hire other than motors	9.50 %
G.	I.T. equipments	15.00 %
H.	Temporary erections such as wooden structures	100.00 %

Debt Equity Ratio (For Tariff calculation)

AS per Regulations Debt equity Ratio of 70:30 i.e.70% Debt & 30% Equity Should be considered for financing Capital Expenditure.

Debt higher than 70% will be allowed. Higher equity can be allowed by Commission in certain cases. In other cases equity above 30% shall be considered as notional loan & interest on that portion will be considered Return on Equity will be allowed at 14%.

Illustration 3.

An Electricity company has acquired plant & machinery costing Rs.20 lakhs having useful life of 15 years. Calculate Depreciation.

Solution : Calculation of Depreciation:

Cost of Assets 20 lakhs
Life 15 years
Salvage value 10% as per regulation. The same is considered.
Cost of Asset 20
– Salvage value 2
Depreciable amount 18
Life 15 years
Depreciation p.a. 18/15 = 1.20 Lakhs

Final accounts of electricity companies (FORMAT) :

NO. I - Statement of Share and loan capital for the year ended 31st March 20—

	Description of capital	Balance at the Beginning	Receipt during the year	Redeemed during the year	Balance at the end of the year
A.	**Share Capital** Ordinary shares of Rs. each % Preference Shares of Rs. each **Total Paid Up Capital**				
B.	**Capital Reserve** Share Forfeiture A/c. Share Premium A/c. Other items (to be specified) **Total Capital Reserve**				
C.	**Loan Capital** Loan from state Electricity Board Debentures Other secured loans Unsecured loans & advance **Total Loan Capital**				
D.	**Other Capital** Contribution from consumers including local authorities for service lines and public lighting **Total Other Capital** Capital Raised and Appropriated **(A + B + C + D)**				

NO. II - Statement of Capital expenditure for the year ended 31st March, 20--

	Particulars	Balance at the Beginning	Addition during the year	Requirement during the year	Balance at the end of the year
A.	**lntangible Assets** 1. Preliminary Promotional expenses 2. Cost of license 3. Other expenses **Total Intangible Assets**				

B.	**Hydraulic Power Plant** 1. Land & Rights. 2. Building. 3. Plant & Machinery **Total Hydraulic Power Plant**				
C.	**Steam Power Plant**				
D.	**Internal combustion power plant**				
E.	**Transmission Plant (High or Extra-High voltage)**				
F.	**Distribution Plant - High voltage**				
G.	**Distribution plant (Medium and low voltage)**				
H.	**Public lighting Street and signal lighting system.**				
I.	**General Equipment (Not allocated to other sub-heads)** 1. Land and Rights 2. Buildings and Structures 3. Office furniture and equipment & others **Total `Capital' Assets In Use**				

NO.III - Statement of operating revenues for the year ended 31st March, 20--

Particulars of Revenue

A. Net Revenue By Sale Of Electricity For Cash & Credit

1. Domestic or residential
2. Commercial
3. Industrial
4. Public Lighting

Total Revenue by sale of electricity.

B. Miscellaneous Revenue From Consumers

1. Rentals from

(a) Meters

(b) Electric motors, fitting, appliances and other apparatus hired to consumers.

Total Miscellaneous Revenue from consumers.

C. Other Revenues

1. Sale of stores
2. Other miscellaneous item (to be specified) Total other Revenues.

Total Operating Revenues

Deduct

Total operating expenses as Per St. IV

Net surplus or deficit carried to the

Net Revenue & Appropriations A/c St. X

NO. IV - Statement of operating expenses for the year ended 31st March, 20--

Particulars of Expenses

A. Hydraulic Power Generation

(a) Operation

(b) Maintenance

(c) Depreciation on Hydraulic Power Generating Plant & equipment

Total Hydraulic Power Generation Expenses

B. Steam Power Generation

C. Internal Combustion Power Generation

D. Power Purchased

Total Production Expenses

A + B + C + D

E. Transmission (High Or Extra High Voltage)

F. Distribution (High Voltage)

G. Distribution (Medium & Low Voltage)

H. Public Lighting

I. Consumers Servicing. Meter Reading. Etc.

J. General Establishment Charges

K. Other Charge

1. Interest paid and accrued on
2. Bad debts written off

L. Management Expenses

1. Directors' fees and expenses and debenture trustees fee, if any

Total Operating Expenses Transferred To Statement III

No.X Statement of net revenue & appropriation account

Particulars	Amount	Particulars	Amount
To Balance of loss brought forwarded from last account	xxx	By balance of profit brought forwarded from last account	xxx
To net operating deficit as per statement III	xxx	By Net operating surplus as per statement III	xxx
To Taxes on income & profit paid	xxx		
To Contribution towards cont-ingencies reserve	xxx	By Interest on securities & investment	xxx
To appropriation to tariffs & dividends control reserve	xxx	By Others receipts (non operating) e.g. rent	xxx
To Appropriation to consumers rebate reserves	xxx		
To Development Reserve	xxx		
To Appropriation towards interest paid & accrued & dividends paid & payable	xxx		
To Balance of profit carried over	xxx		
Total		**Total**	

Statement XI General Balance Sheet as on 31st March 20--

Liabilities	Amount	Assets	Amount
Capital raised & appropriate	xxx	Capital amount extended on works	
(Statement-I)	xxx	in use : (Statement-II)	xxx
Reserve and Surplus :	xxx	Less : Depreciation fund	xxx
Contingency reserve	xxx	Current Assets :	xxx
Development reserve	xxx	Stock in hand	xxx
Tariff & Dividend Control reserve	xxx	Sundry Debtors	xxx
Consumer Rebate reserve	xxx	Contingency	xxx
Balance of Net Revenue A/c –	xxx	Reserve Investment	xxx
Statement X	xxx	Bank Balance	xxx
Current Liabilities & Provisions :	xxx	Cash in hand	xxx
Creditors	xxx	Prepaid expenses	
Proposed Dividend	xxx		
Total	**xxx**	**Total**	**xxx**

Important Note :

The Electricity Act, 2003 which governs Electricity Companies don't prescribe any format for preparation & presentation of Financial Statement hence Revised (New) Schedule VI of Companies Act should be followed. Hence Some Problems are solved as per this format.

The problems covered in this chapter includes :

1. Final Accounts as per Double Account System which included Revenue A/c, Net Revenue A/c, Receipt & Expenditure on Capital A/c & General Balance Sheet.
2. Replacement of Asset as per Double Account System.
3. Disposal of surplus as per Electricity Rules.

Questions in the examination may be framed on point 1 above.

: SOLVED PROBLEMS :

Problem 1 :

The **G-One Electricity Company** decided to replace some parts of its plant by an improved plant. The plant to be replaced was built in 2022 for Rs. 54,00,000. It is estimated that it would now cost Rs. 80,00,000 to build a new plant of the same size and capacity. The cost of new plant as per the improved design was Rs. 1,70,00,000 and in addition, material belonging to the old plant valued at Rs. 5,50,000 was used in the construction of the new plant. The balance of the plant was sold for Rs. 3,00,000. Compute, the amount to be written off to revenue.

Solution :

Amount chargeable to Revenue

Particulars	Rs.	Rs.
Estimated Current cost of replacing old plant		80,00,000
Less : Break up value of replacing old plant	3,00,000	
Value of materials belonging to the plant used in the construction of the new plant	5,50,000	8,50,000
Total		**71,50,000**
Amount to be capitalised		
Cost of building new plant (cash)	1,70,00,000	
Add : Value of materials belonging to the old plant in the construction of new plant	5,50,000	1,75,50,000
Less : Estimated current cost of replacing old plant		80,00,000
Total		**95,50,000**

The accounts will be as under:

Plant Account

Particulars	Rs.	Particulars	Rs.
To Balance b/d	54,00,000	By Balance c/d	1,49,50,000
To Cost of Construction:			
Cash	90,00,000		
Cost of old materials used	5,50,000		
	1,49,50,000		**1,49,50,000**
To Balance b/d	1,49,50,000		

Replacement Account

Particulars	Rs.	Particulars	Rs.
To Bank-portion to be	80,00,000	By Bank	3,00,000
written off out of		By Plant Account	5,50,000
replacement cost		By Revenue Account	71,50,000
	80,00,000		**80,00,000**

Problem 2 :

An **Smooth Power Electricity Company Ltd.** laid down a Main at a cost of Rs. 8,00,000. Some years later the company laid down an auxiliary Main for one-fourth of the old Main at a cost of Rs. 3,00,000. It also replaced the rest of the length of the old Main at a cost of Rs. 9,00,000 the cost of material and labour having gone up by 10%. Sale of old materials realized Rs. 20,000. Old materials valued at Rs. 20,000 were used in renewal and those valued at Rs. 30,000 were used in auxiliary Main.

Show the Journal Entries for recording the above transactions. Show workings.

Solution :

Journal of Electricity Co.

Particulars		Rs.	Rs.
Replacement Account	Dr.	6,60,000	
To Bank Account			6,60,000
(Current cost of replacement of ¾ Main charged to Replacement Account)			
New Main Account	Dr.	3,00,000	
To Bank Account			2,70,000
To Replacement Account			30,000
(Cost incurred on laying auxiliary main including old material worth Rs. 30,000)			

New Main Account To Bank Account To Replacement Account (Additional Cost of New Main capitalized including cost of old material used Rs. 20,000)	Dr.	2,40,000	 2,20,000 20,000
Bank A/c To Replacement Account (Sale of old materials)	Dr.	20,000	 20,000
Revenue Account To Replacement Account (Net current cost of replacement transferred)	Dr.	5,90,000	5,90,000

Working Notes:

Amount of additional cost to be capitalized

Particulars	**Rs.**
Cost of ¾ of old Main	6,00,000
Add : Increase in cost by 10%	60,000
	6,60,000
Cost of replacement	9,00,000
Additional cost of new Main (to be capitalized)	2,40,000
Less : Cost of old material	20,000
Additional cash cost of replacement	**2,20,000**

Problem 3 :

The **Wipro Electricity Company Limited** decides to replace one of its old plants with a modern one with a larger capacity. The plant when installed in 2024 cost the company Rs. 48 lakhs, the components of materials, labour and overheads being in the ratio of 5:3:2. It is ascertained that the costs of materials and labour have gone up by 40% and 80% respectively. The proportion of overheads to total costs is expected to remain the same as before.

The cost of the new plant as per improved design is Rs. 120 lakhs and in addition, material recovered from the old plant of a value of Rs. 4,80,000 has been used in the construction of the new plan. The old plant was scrapped and sold for Rs. 15,00,000.

The accounts of the company are maintained under the double account system, indicate how much would be capitalized and the amount that would be charged to revenue. **Show the ledger account.**

Solution :

Wipro Electricity Company Limited

Dr. **Cr.**

Particulars	Rs.	Particulars	Rs.
To Balance b/d	48,00,000	By Balance c/d	98,40,000
To Bank A/c (cost of new plant capitalized)	45,60,000		
To Replacement A/c (old parts)	4,80,000		
	98,40,000		**98,40,000**
To Balance b/d	98,40,000		

Replacement Account

Particulars	Rs.	Particulars	Rs.
To Bank A/c (Current cost of replacement)	74,40,000	By Bank A/c (sale of scrap)	15,00,000
		By Plant A/c (old material used)	4,80,000
		By Revenue A/c (transfer)	54,60,000
	74,40,000		**74,40,000**

Working Note :

Cost to be incurred for replacement of present plant :

Particulars	Cost of existing plant Rs.	Increase %	Current Cost Rs.
Materials	24,00,000	40 %	33,60,000
Labour	14,40,000	80 %	25,92,000
			59,52,000
Overheads (1/4 of the above or 1/5 of the total)			14,88,000
Current replacement cost			**74,40,000**
Current replacement cost			74,40,000
Total cash cost			1,20,00,000
Amount capitalisead. Excluding old materials used			**45,60,000**

Problem 4 :

Harison Power Supply Co. Ltd. Has built a power station and the connecting lines during the year 2021. The following further particulars are furnished to you :

i) In the year 2021. The company incurred on amount of Rs. 17,89,100 towards purchase of machinery items and Rs. 1,98,150 towards labour expenses. The company also used stores worth Rs. 3,91,750 from its existing stock which was in the godown.

ii) Extension and replacement was carried out to the power station in the year 2024 of a cost of Rs. 7,60,000 out of which material worth Rs. 15,000 was tised from existing stock for replacement was estimated at 20% of original cost.

iii) The cost of materials and wages in 2024 have gone up by 25%.

iv) The old material discarded in the process of extension and replacement was of the value of Rs. 71,000.

v) Out of the above, material valued at Rs. 37,500 was used for extension purposes and the balance not being used was sold for Rs. 33,500.

You are required :

To Journal entries in respect of the above transaction for the year 2021 and 2024. Workings should form part of your answer.

Solution :

Harison Power Supply Co. Ltd.
Journal Entries

Date	Particulars	L/F	Dr. Rs.	Cr. Rs.
i)	New works A/c …… Dr.		23,79,000	
	To Bank			19,87,850
2021	To Stores			3,91,150
	(Cost of power station & connecting lines – Machinery Rs. 17,89,100 labour expenses Rs. 1,98,750 and stores stores Rs. 3,91,150 capitalised).			
ii)	New work A/c …… Dr.		1,65,250	
	Replacement A/c ……...Dr.		5,94,750	
2024	To Bank			7,45,000
	To Stores			15,000
	(Cost of 20% replacement ad extension cost of Rs. 1,65,250 capitalised)*.			

	Bank A/c ……Dr. New work A/c** …….Dr. To Replacement A/c (Cost of old material used in new works Rs. 37,500 and balance sold for Rs. 33,500).		33,500 37,500	 71,000

Working Note :

Current Cost of Replacement :	**Rs**
Cost in 2021	23,79,000
Cost of 20% of plant replaced	4,75,800
Add : Increase in cost 25%	1,18,950
Current cost of replacement	5,94,750

* It has been assumed that total cost including purchase of machinery in 2024 has gone up by 25%.

** It has been assumed that cost of old material used is not included in Rs. 7,60,000 cost of new works given in the question.

Problem 5 :

Bijlee Electricity Company Ltd. decides to replace one of its old plants with a modern one in April 2024. The plant when installed in the year 2020, costed the company Rs.52 lakhs, the components of materials and labour being in the ratio of 7 : 3. It is ascertained that the cost of labour and materials have raised by 30% and 25% respectively. The cost of new plant is Rs.132 lakhs and in addition old materials worth Rs.1,84,000 are reused. Old materials worth Rs.3,36,000 are sold. Under double account system compute the following:

(i) The amount to be written off to Revenue A/c.
(ii) The amount to be capitalized.
(iii) Draw up the necessary Journal entries.
(iv) Draw up the Replacement Account.

Solution:

(i) Statement showing amount to be written off to Revenue Account:

Particulars	**Rs.**	**Rs.**
Cost of old plant		52,00,000
Add: Increase in cost of material $52,00,000 \times \frac{7}{10} \times \frac{25}{100}$		9,10,000

Increase in cost of Labour $52,00,000 \times \frac{3}{10} \times \frac{36}{100}$		4,68,000
Current cost of old plant		65,78,000
Less: Cost of Material used	1,84,000	
Cost of Material sold	3,36,000	(-) 5,20,000
Amount to be written off to Revenue A/c		60,58,000

(ii) Statement showing amount to be capitalized

Cost of new plant excluding the value of old materials used		1,32,00,000
Less: Current cost of old plant		65,78,000
Current cost to be capitalized		66,22,000
Add: Value of old material used		1,84,000
Total amount to be capitalized		68,06,000

(iii) Journal Entries in the Books of Bijlee Electricity Company Ltd.

Particulars	Rs.	Rs.
(a) Replacement Account Dr.	65,78,000	
To Bank Account		65,78,000
(Being the replacement of old plant by a new plant; the current cost of replacement Rs.6,578,000)		
(b) Plant Account Dr.	68,06,000	
To Replacement Account		1,84,000
To Bank Account		66,22,000
(Being additional cost of new plant capitalized and also old materials used in construction of new plant)		
(c) Bank Account Dr.	3,36,000	
To Replacement A/c		3,36,000
(Being the sale of old materials for Rs.3,36,000)		
(d) Revenue A/c Dr.	60,58,000	
To Replacement Account		60,58,000
(Being the balance of replacement account transferred to revenue account)		

Dr. **Cr.**

Particulars	Rs.	Particulars	Rs.
To Bank A/c	65,78,000	By New Plant A/c	1,84,000
		By Bank A/c	3,36,000
		By Revenue A/c (Balancing Fig.)	60,58,000
	65,78,000		**65,78,000**

Problem 6 :

From the following information and details relating to the year ended 31st March 2024 and bearing in mind the provisions of the Electricity (Supply) Act, 1948 indicate the disposal of profit of **Sun Power Limited:**

Particulars	Rs.
Net Profit before charging debenture interest	38,20,200
Fixed Assets (at cost)	4,20,00,000
Depreciation written off on Fixed assets	98,00,000
Loan from Electricity Board	1,20,00,000
6% Investments of the Reserve fund	90,00,000
6% Investment of the Contingencies Reserve	76,00,000
Tariffs and Dividends Control reserve	8,40,000
Security Deposit of Customers	4,84,000
Customer's contribution of Main lines	3,20,000
Preliminary expenses	1,40,000
Average of Current assets	47,40,000
Development reserve	4,40,000
10% debenture Interest paid in the year	15,00,000
Assume Reserve Bank of India rate is 8%	

Solution:

In the Books of Sun Power Limited

Statement showing disposal of profit for the year ended 31st March, 2024

Particulars	Rs.	Rs.
Capital Base:		
Value of Fixed Assets as reduced by Customer's contribution		4,16,80,000
Preliminary expenses		1,40,000
Average of Current Assets		47,40,000
Investment of the Contingencies Reserve		76,00,000
		54,160,000

Deduct: Depreciation on Fixed Assets	98,00,000	
Loan from Electricity Board	1,20,00,000	
Debentures	1,50,00,000	
Tariffs and Dividends Control Reserve	8,40,000	
Security deposits	4,84,000	
Development reserve	4,40,000	3,85,64,000
Capital Base		**1,55,96,000**
		Rs.
Reasonable Return:		
10% (Bank rate 8% + 2%) on capital base		15,59,600
1/2% on loan from Electricity Board		60,000
1/2% on development reserve		2,200
1/2% on debentures		75,000
Income from Reserve fund Investments		5,40,000
		22,36,800
Surplus and its disposal		
Profit		38,20,200
Less: Debenture interest		15,00,000
		23,20,200
Less: Reasonable return		22,36,800
Surplus		83,400
Disposal		
1/3 (being less than 5% of reasonable return) at the disposal of the company		27,800
Of the balance 1/2 to Tariffs and Dividends Control Reserve		27,800
1/2 to consumers for credit to Customer's Benefit A/c		27,800
		83,400

Problem 7 :

The trial balance of **Shravani Electric Supply Ltd.** for the year ended 31st March 2024 is as below:

(Rs. '000)

Particular	Debit	Credit
Share Capital :		
Equity Shares of Rs.10 each		500,00
14% Preference Shares of Rs.100 each		150,00

Patents and trade mark	25,04	
15% Debentures		247,00
16% Term Loan		153,00
Land (additions during the year 20,50)	124,50	
Building (additions during the year 50,80)	351,34	
Plant & Machinery	570,58	
Mains	45,24	
Meters	31,50	
Electrical Instrument	15,30	
Office furniture	24,50	
Capital reserve		50,20
Contingency reserves		120,30
Transformers	164,40	
Net revenue account		53,50
Stock in hand	120,50	
Sundry debtors	62,46	
Contingency reserve investment	120,10	
Cash & Bank	32,54	
Public Lamps	30,40	
Depreciation fund		258,16
Sundry Creditors		65,24
Proposed dividend		121,00
	17,18,40	**17,18,40**

During 2023-24 Rs. ('000) 100,00 of 14% preference shares were redeemed at a premium of 10 % out of proceeds of fresh issue of equity shares of necessary amounts at a premium of 10%.

Prepare for the above period as per the prescribed format:

i) Statement of share and loan capital.

ii) Statement of Capital expenditure.

iii) General Balance, Sheet as on 31st March 2024.

Solution:

Statement – I

Statement of Share and Loan Capital for the year ended 31st March 2024

(Rs.'000)

Description of Capital	Balance at the beginning of the year	Receipts during the year	Redeemed during the year	Balance at the end of the year
A. Share Capital:				
Authorised Capital	-	-	-	-
Issued and paid up capital				
50,00,000 equity shares of Rs. 10 each	400,00	100,00	-	500,00
1,50,000 14% Preference shares of Rs. 100 each	250,00	-	100,00	150,00
	650,00	**100,00**	**100,00**	**650,00**
B. Capital Reserve	50,20	-	-	50,20
C. Loan Capital:				
15% Debentures	247,00	-	-	247,00
16% Term Loan	153,00	-	-	153,00
	400,00			**400,00**
D. Other Capital:	-	-	-	-
Total Capital raised and appropriated (A+B+C+D)	**11,00,20**	**100,00**	**100,00**	**11,00,20**

Statement – II

Statement of Capital Expenditure for the year ended 31st March 2024

(Rs.'000)

Particulars	Balance at the beginning of the year	Receipts during the year	Redeemed during the year	Balance at the end of the year
A. Intangible Assets:				
Patents and Trade Marks	25,04	-	-	25,04
B. Hydraulic Power Plant	-	-	-	-
C. Steam Power Plant :				
Land	104,00	20,50	-	124,50
Building	300,54	50,80	-	351,34
Plant & Machinery	570,58	-	-	570,58
	975,12	**71,30**	**-**	**10,46,42**

D. Internal Combustion Power Plant	-	-	-	-
E. Transmission Plant : Transformer	164,40	-	-	164,40
F. Distribution Plant (H.V.)				
Mains	45,24	-	-	45,24
Meters	31,50	-	-	31,50
	76,74	-	-	**76,74**
G Distribution Plant (L.V.)	-	-	-	-
H. Public Lighting				
Public Lamps	30,40	-	-	30,40
I. General Equipments ;				
Electrical Instruments	15,30	-	-	15,30
Office Furniture	24,50	-	-	24,50
	39,80	-	-	39,80
Total Capital Assets in Use	**13,11,50**	**71,30**	-	**13,82,80**

Statement XI
General Balance Sheet as on 31st March 2024

(Rs.'000)

Corresponding figure of previous year	Particulars	Amount	Corresponding figure of previous year	Particulars	Amount
	Capital raised & appropriated			Capital Amount extended on	
	Statement –I	11,00,20		works in use Statement-II	13,82,80
	Contingency Reserve	120,30		Less: Depreciation fund	258,16
	Balance of net Return A/c	53,50			**11,24,64**
	Current Liabilities & Provisions			Current Assets	
	Sundry creditors	65,24		Stock in hand	120,50
	Proposed dividend	121,00		Sundry debtors	62,46
				Contingency Reserve	120,10
				Investment	
				Cash & Bank balances	32,54
		14,60,24			**14,60,24**

Problem 8 :

From the following balances as at 31st December, 2024. **Prepare the revenue account. Net revenue account. Capital account and general balance sheet of Kiran Power and Light Co. Ltd.**

Particulars	Rs.
Balance as on 1st January, 2024	
Land	7,20,000
Machinery	28,80,000
Mains	9,60,000
Expenditure during the years	
Land	24,000
Machinery	24,000
Mains	2,44,800
Share capital – ordinary shares	26,35,200
Debentures	9,60,000
Sundry creditors	4,800
Cost of generation	1,68,000
Rent, rates and taxes	24,000
Expenses of management	57,600
Cost of distribution	24,000
Depreciation	96,000
Sales of Current	6,24,000
Meter rent	24,000
Interest on debentures	48,000
Interim dividend	96,000
Net revenue account as on 1.1.2024	1,36,800
Depreciation fund	12,00,000
Sundry debtors -	
For energy supplied	1,92,000
Other	2,400
Cash balance	24,000

Solution :

Revenue account of the Kiran Power and Light Co. Ltd.
For the year ended 31st December, 2024

Particulars	Rs.	Particulars	Rs.
To Cost of generation	1,68,000	By Sale of Current	6,24,000
To Cost of distribution	24,000	By Meter rent	24,000
To Rent, rates & taxes	24,000		
To Management expenses	57,600		
To Depreciation	96,000		
To Balance carried to net revenue account	2,78,400		
	6,48,000		**6,48,000**

Net Revenue Account

Particulars	Rs.	Particulars	Rs.
To Interest on debentures	48,000	By Balance b/d	1,36,800
To Interim dividend	96,000	By Revenue of the year	2,78,400
To Balance c/d	2,71,200		
	4,15,200		**4,15,200**

Kiran Power and Light Co. Ltd.
Receipts and expenditure on capital account
For the year ended 31st December, 2024

Expenditure	Upto 31st Dec. 2023	During the year	Total	Receipts	Upto 31st Dec. 2023	During the year	Total
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
To Land	7,20,000	24,000	7,44,000	By Ordinary shares	26,35,200	-	26,35,200
To Machinery	28,80,000	24,000	29,04,000	By Debentures	9,60,000	-	9,60,000
To Mains	9,60,000	2,44,800	12,04,800		35,95,200	-	35,95,200
				By Balance on capital A/c	9,64,800	-	9,64,800
	45,60,000	**2,92,800**	**48,52,800**		**45,60,000**		**48,52,800**

General balance sheet of Kiran Power & Light Co. Ltd.
As on 31st December, 2024

Particulars		Rs.	Particulars		Rs.
Capital Account			**Capital Account**		
Amount reserved		35,95,200	Expenditure on works		48,52,800
Sundry creditors :		4,800	**Sundry debtors :**		
Net revenue account :			For current suppliers	1,92,000	
				2,400	1,94,000
Depreciation Fund :			**Cash Balance**		24,000
Opening Balance	11,04,000				
Addition	96,000	12,00,000			
		50,71,200			**50,71,200**

Problem 9 :

From the following balances of **Bombay Electricity Company Ltd.** as at 31st December, 2024, prepare the Revenue Account, Net Revenue Account, Capital Account and General Balance Sheet of Bombay Electricity Company Ltd.

Particulars	Rs.	Particulars	Rs.
Balance as on 1st January, 2024		Expenses of Management	28,800
Land	3,60,000	Cost of Distribution	12,000
Machinery	14,40,000	Depreciation	48,000
Mains	4,80,000	Sales of Current	3,12,000
Expenditure during the year		Meter Rent	12,000
Land	12,000	Interest on Debentures	24,000
Machinery	12,000	Interim Dividend	48,000
Mains	1,22,400	Net Revenue A/c as on 1-1-2024	68,400
Share Capital-Ordinary	13,17,600	Sundry Debtors:	
Shares Debentures	4,80,000	For energy supplied	96,000
Sundry Creditors	2,400	Other	1,200
Cost of Generation	84,000	Cash Balance	12,000
Rent, Rates and Taxes	12,000	Depreciation Fund	6,00,000

Solution :

BALANCE SHEET (As per Revised Schedule VI)
Balance Sheet of Bombay Electricity Company Ltd.

	Particulars	Notes	Rs.	Rs.
I.	**CAPITAL AND LIABILITIES**			
(1)	**Shareholders' funds**			
	Share capital	1	13,17,600	
	Reserves and surplus		1,35,600	14,53,200
(2)	**Share application money pending allotment**			--
(3)	**Non-current liabilities**			
	Long-term borrowings			
	Debenture			4,80,000
(4)	**Current liabilities**			
	Trade Payables			2,400
	TOTAL			**19,35,600**
II.	**ASSETS**			
(1)	**Non-current assets**			
	Fixed assets	2		18,26,400
(2)	**Current assets**			
	Trade receivables		96,000	
	Cash and cash equivalents		12,000	
	Other current assets		1,200	1,09,200
	TOTAL			**19,35,600**

Profit & Loss Account (As per Revised Schedule VI)
Bombay Electricity Company Ltd.
Profit and loss statement for the year ended 31.12.2024

	Particulars		Rs.
I.	Revenue from operations: Sales of current Other		3,12,000
II.	Income: Meter rent		12,000
III.	**Total Revenue** (I+II)		**3,24,000**
IV.	**Expenses:**		
	Cost of Generation		84,000
	Finance costs: Interest on Debenture		24,000
	Depreciation and amortisation expenses		48,000
	Other expenses		
	Rent Rates Taxes	12,000	
	Expense of Management	28,800	
	Cost of distribution	12,000	52,800
	Total Expenses		**2,08,800**

V.	Profit before exceptional and extraordinary items	1,15,200
VI.	and tax Exceptional items	--
VII.	Profit before extraordinary items	1,15,200
VIII.	and tax Extraordinary Items	--
IX.	Profit before tax	1,15,200
X.	Tax expense:	--
XV.	Profit (Loss) for the period	1,15,200

Note No. 1: Reserve & Surplus:

	Profit & Loss Account (Net Revenue A/c)			**Rs.**
	Balance brought forward		68,400	
	Add: Profit for the year		1,15,200	
	Less: Interim Dividend		(48,000)	1,35,600

Note No. 2: Fixed Assets:

	Fixed Assets	**Opening**	**Additions**	**Closing**
	Land	3,60,000	12,000	3,72,000
	Machinery	14,40,000	12,000	14,52,000
	Mains	4,80,000	1,22,400	6,02,400
	Total			24,26,400
	Less: Depreciation Fund			6,00,000
	Closing WDV			18,26,400

Problem 10 :

The following balances are drawn from the books of **Surya Electricity Supply Company** for the year ended 31st December, 2024, **Finalise the accounts following double accounts system (you may ignore the requirements of the Indian Electricity Rules, 1956).**

Particulars		**Rs.**
Sale of Electricity :	Domestic	37,60,000
	Commercial	90,06,000
Misc. Revenues :	Meter Rent Service	94,000
	Connections Fees	87,500
	Public Lighting	1,40,000
Maintenance Other Revenues:	Sale of Stores	25,000
	Repair of Electrical Apparatus	20,000
Maintenance Expenses:		
Salaries		39,20,000

Operations & Maintenance of High Voltage Distribution	20,06,000
Operations & Maintenance of Medium & Low Voltage Distribution	18,20,000
Public Lighting	6,08,500
Consumers' Servicing	25,000
General Establishment Charges	1,42,500
Interest	6,05,000
Bad Debts	40,000
Management Charges	2,40,000
Assets as on 1-1-2024:	
Distribution Plant - High Voltage	90,25,000
Distribution Plant - Medium and Low Voltage	45,45,000
Public Lighting	20,00,000
General Equipment	25,00,000
Share Capital: 10,00,000 equity shares of Rs.10 each	50,00,000
Government Grant	5,00,000
Consumers' Contribution for Service Line	25,00,000
Loan	1,20,00,000
Reserve	20,25,000
Capital Expenditure During 2024: High Voltage Distribution Plant	7,00,000
Medium and Low Voltage Distribution Plant	7,50,000
Loan raised during 2012: 10% Electricity Board	12,50,000
Other Assets and Liabilities as on 31-12-2024:	
Sundry Creditors	7,61,000
Sundry Debtors	13,68,000
Cash-at Bank	31,48,500
Investments	41,25,000
Charge Depreciation @ 5% on all assets.	

Solution:

Balance Sheet (As per Revised Schedule VI)

Balance Sheet of Surya Electricity Supply Company

	Particulars	Notes	Rs.	Rs.
I.	CAPITAL AND LIABILITIES			
1)	**Shareholders' funds**			
	Share capital		50,00,000	
	Reserves and surplus	1	77,74,500	1,27,74,500
2)	**Share application money pending allotment**			--

3)	**Non-current liabilities**			
	Long-term borrowings: Loans	2		1,32,50,000
4)	**Current liabilities**			
	Trade Payables			7,61,000
	Total			**2,67,85,500**
II.	**ASSETS**			
1)	**Non-current assets**			
	Fixed assets	3	1,81,44,000	
	Non-current investment		41,25,000	2,22,69,000
2)	**Current assets**			
	Trade receivables		13,68,000	
	Cash and cash equivalents		31,48,500	45,16,500
	Total			**2,67,85,500**

Profit & Loss Account (As per Revised Schedule VI)

Electricity Supply Company.

Profit and loss statement for the year ended 31.12.2024

	Particulars	**Notes**	**Rs.**
I.	Revenue from operations: Sales of current	4	1,27,66,000
II.	Other income:	5	3,66,500
III.	**Total Revenue** (I+II)		1,31,32,500
IV.	**Expenses:**		
	Cost of Generation & Operation, Maintenance	6	44,34,500
	Employee benefit cost		39,20,000
	Finance costs: Interest on Debenture		6,05,000
	Depreciation and amortisation expenses		9,76,000
	Other expenses	7	4,47,500
	Total Expenses		1,03,83,000
V.	Profit before exceptional and extraordinary items and tax		27,49,500
VI.	Exceptional items		--
VII.	Profit before extraordinary items and tax		27,49,500
VIII.	Extraordinary Items		--
IX.	Profit before tax		27,49,500
X.	Tax expense:		--
XV.	Profit (Loss) for the period		27,49,500

Note No. 1: Reserve & Surplus:

		Rs.
	Capital reserve: Govt. Grant	5,00,000
	: Consumers contribution for service line	25,00,000
	Reserves	20,25,000
	Profit & loss account	27,49,500
		77,74,500

Note No. 2: Long term Borrowings:

	Loans			Rs.
	Balance brought forward		1,20,00,000	
	Addition during the year		12,50,000	**1,32,50,000**

Note No. 3: Fixed Assets:

	Fixed Assets	Opening	Additions	Closing
	Distribution Plant - High voltage	90,25,000	7,00,000	97,25,000
	- Medium & low voltage	45,45,000	7,50,000	52,95,000
	Public lighting	20,00,000		20,00,000
	General equipment	25,00,000		25,00,000
	Total			**1,95,20,000**
	Less: Depreciation Provision: Opening		4,00,000	
	Current year @5% on 3,90,40,000		9,76,000	13,76,000
	Closing WDV			**1,81,44,000**

Sp. Note: Difference in trial balance Rs.8,00,000 credit short is assumed as Opening depreciation provision. Current years depreciation is assumed by SLM.

Note No. 4: Sales:

	Sale of Electricity			Rs.
	Domestic		37,60,000	
	Commercial		90,06,000	**1,27,66,000**

Note No. 5: Other Income:

	Misc. & Other revenue			Rs.
	Meter Rent		94,000	
	Service connection fees		87,500	
	Public lighting maintenance		1,40,000	
	Sales of stores		25,000	
	Repair of electrical apparatus		20,000	**3,66,500**

Note No. 6: Generation, Operation & Maintenance Expenses:

				Rs.
	Operation & Maintenance - High voltage dist.		20,06,000	
	- Medium & low voltage dist.		18,20,000	
	- Public lighting		6,08,500	**44,34,500**

Note No. 7: Other Expenses:

	Other expenses			Rs.
	Consumer Servicing		25,000	
	General establishment charges		1,42,500	
	Bad debt		40,000	
	Management charges		2,40,000	**4,47,500**

Problem 11 :

Jalgaon Power Electric Supply Co.Ltd. gives you the following extract from its trial balance as on 31st March 2024.

Particulars	Rs.	Dr. Rs.	Cr. Rs.
Purchase of energy		31,12,500	
Salaries and wages (includes wages to sub-station labour of Rs.1,70,000 & distribution labour Rs.1,25,000)		6,00,000	
Repair & Maintenance:			
Buildings	11,250		
Plant and Machinery	3,750		

Transformers	45,000		
Mains and services	2,55,000		
Lorries	9,000	3,24,000	
Establishment expenses		9,97,500	
Rent, rates and taxes		38,250	
Conveyance and travelling		30,000	
Audit fees		11,250	
General expenses		75,000	
Directors fees and allowances		12,750	
Interest on loans		1,76,250	
Interest on consumers security deposits		60,000	
Electricity duty		5,25,000	
Sale of energy:			
Domestic	12,87,500		
Industrial	74,50,000		87,37,500
Rental of meters			52,500
Maintenance of public lamps			11,250
Hire on machines and goods			18,750
Misc. receipts			7,500
Net Revenue A/c (balance as on 1-4-2023)			37,675
The following adjustments have to be made:			
(a) Depreciation for the year (includes depreciation) on building plant etc. of Rs.4,62,500)		8,62,500	
(b) Provisions for taxation		11,40,000	
(c) Transfer to Contingency reserve		1,12,500	
(d) Transfer to Development reserve		60,000	

The amount of reasonable return may be presumed to be Rs.5,97,000

You are required to prepare for the above period:

(i) Statement of operating revenues.

(ii) Statement of operating expenses

(iii) Statement of Net revenue and appropriations account.

Solution :

In the books of Jalgaon Power Electric Supply Co. Ltd.

Statement – III
Statement of Operating Revenues
For the year ended 31st March, 2024

Particulars of Revenue	Corresponding amount for the previous year Rs.	Amount for the current year Rs.
A. Net revenue by sale of electricity:		
Domestic		12,87,500
Industrial		74,50,000
Public lighting		11,250
Total revenue by sale of electricity		**87,48,750**
B. Miscellaneous revenue from consumers:		
Meter Rent		52,500
C. Other revenues:		
Hire on machinery & goods	18,750 *	
Misc, receipts	7,500	
Total other revenues		26,250
Total operating revenues (A+B+C)		88,27,500
Less: Total operating expenses as per Schedule IV		66,48,750
Net surplus carried to Net Revenue Account-Statement X		**21,78,750**
* Misc. receipts are considered to be operating in nature.		

Statement IV
Statement of Operating Expenses
For the year ended 31st March, 2024

Particulars of Revenue	Corresponding amount for the previous year Rs.	Amount for the current year Rs.
A. Hydraulic Power Generation		–
B. Steam Power Generation		–
C. Internal Combustion Power Generation		–
D. Power purchased		31,12,500
Total production expenses		**31,12,500**

E. Transmission:		
(a) Operation and maintenance:		
Wages of substation labour		1,70,000
Repairs and maintenance:		
Buildings		11,250
Plant & Machinery		3,750
Transformers		45,000
		2,30,000
(b) Depreciation:		
Building, Plant and transformer		4,62,500
Total Transmission expenses		**6,92,500**
F. Distribution (HV)		
(a) Operation and maintenance:		
Electricity duty		5,25,000
Wages for distribution labour		1,25,000
Repairs and Maintenance		–
Mains and Services		2,55,000
Lorries		9,000
		9,14,000
(b) Depreciation		4,00,000
Total Distribution Expenses		**13,14,000**
G. Distribution (LV)		–
H. Public Lighting		–
I. Consumers Servicing		–
K. General Establishment Charges:		
Office Salaries		3,05,000
Rent and taxes		38,250
Conveyance and travelling		30,000
Establishment expenses		9,97,500
Audit fees		11,250
General expenses		75,000
Total general establishment charges		**14,57,000**
L. Other charges:		
Interest on consumers security deposits		60,000
		60,000
M. Management Expenses:		
Directors fees and allowances		12,750
Total operating expenses transferred to Statement-III		**66,48,750**

Statement X

Statement of Net Revenue and Appropriation Account

For the year ended 31st March 2023

Corres-ponding figure of previous year	Particulars	Amount	Corres-ponding figure of previous year	Particulars	Amount
	To Provision for taxation	11,40,000		By Balance of Profit b/f	37,675
	To Contribution towards contingency reserve	1,12,500		Net operating surplus as per Statement III	21,78,750
	To Contribution towards Development reserve	60,000			
	To Appropriation to Tariff and Dividends Control Reserve	31,575			
	To Appropriation to Consumer's Rebate Reserve	31,575			
	To Interest on Loan	1,76,250			
		22,16,425			**22,16,425**

Workings:

(a) Calculation of clear profit:

Particulars	Rs.	Rs.
Net operating surplus as per Statement III		21,78,750
Less: Interest on loans	1,76,250	
Less: Provision fo taxation	11,40,000	
Less: Contribution towards contingency reserve	1,12,500	
Less: Contribution towards Development reserve	60,000	14,88,750
Clear profit		6,90,000

(b) Distribution of Surplus:

Surplus = Clear profit – Reasonable return		
= Rs.6,90,000 – Rs.5,97,000		93,000
1/3rd of surplus	31,000	
5% of Reasonable return	29,850	29,850
Whichever is less, is at the disposal – of the undertaking		63,150
1/2 of above to Tariff and Dividend control reserve		31,575
Balance available for benefit of consumers		31,575
		63,150

Problem 12 :

From the balances extracted from the books of the **Maha Power Electric Supply Company Ltd.** for the year ended 31st March 2024 prepare annual accounts as per the format given in the Indian Electricity Rules 1956.

The Authorised Capital of the company was Rs.4,00,00,000 divided into shares of Rs.100 each. Of this Rs.40,00,000 was issued for cash and fully paid up. A bonus issue of Rs. 40,00,000 had also been made. The books showed the following balances as at 31st March 2022.

Particulars	Rs.
Share Capital	80,00,000
Mortgage Debentures	2,56,00,000
Buildings (additions during the year Rs.10,00,000)	80,00,000
Mains (additions during the year Rs. 6,80,000)	20,00,000
Machinery, plant etc. (-Do- 19,00,000)	1,00,00,000
Accumulators (-Do- 20,800)	81,840
Land (-Do- 11,60,000)	1,12,00,000
Public Lamps (-Do- 52,000)	4,80,000
Tools and Loose Plant (-Do- 14,000)	1,75,520
Rents	2,00,000
Rates and Taxes	1,53,440
Coal : Carriages etc.	10,72,320
Office Furniture and Fittings	19,600
Prepaid Expenses	32,000
Contingencies Reserve Investments	4,00,000
Sundry Debtors	29,20,000
Sundry Creditors	5,50,020
Capital Reserve	3,20,000
Stores in hand	25,28,000
Balance of Net Revenue Account	32,160
Auditors Fees	40,000
Cash discount received on purchases	5,600
Meter and other Rents	1,36,400
Director's Remuneration	80,000
Office Salaries	1,78,400
General Office Expenses	1,20,000

I.F.C.I. loan secured on immovable properties	16,00,000
Repairs and Maintenance:	
Buildings	22,200
Plant	40,200
Distributing Equipment	87,360
Salaries to Engineers and officers:	
Generation	71,360
Distribution	20,400
Interest on Cont. Reserve Investments	12,000
Share Transfer Fees	400
Expenditure on public lamps:	
Attendance & Repairs	1,30,000
Renewals	44,000
Issurance Premia	38,400
Interest on Debentures and Loans	10,44,000
Electric Instruments	44,000
Receipts from Sale of Current:	
Lighting	25,20,000
Power	20,36,000
Public Lamps	5,00,000
Law Charges	12,000
Sales proceeds of Scrap	800
Depreciation Fund	6,40,000
Contingencies Reserve	4,00,000
Oil, Waste and Other Stores (Consumed)	1,45,040
Wages: Generation	2,67,760
Distribution	1,85,360
Cash in hand	1,59,040
Cash at bank in Current Account	3,61,140

Appropriate Rs.7,20,000 to Depreciation Fund and Rs.1,60,000 to Contingencies Reserve and provide for dividend on ordinary shares at 4%.

Solution:

In the books of Maha Power Electric Supply Company Ltd.
Statement – I
Statement of Share and Loan Capital for the year ended 31st March 2024

Description of Capital	Balance at the beginning of the year Rs.	Receipts during the year Rs.	Redeemed during the year Rs.	Balance at the end of the year Rs.
A. Share Capital:				
Authorised Capital : 4,00,000 equity shares of Rs.100 each	4,00,00,000			
Issued & paid up capital 80,000 equity shares of Rs.100 each	80,00,000	-	-	80,00,000
Total Paid up capital	80,00,000			80,00,000
B. Capital Reserve	3,20,000	-	-	3,20,000
C. Loan Capital				
Mortgage Debentures	2,56,00,000	-	-	2,56,00,000
IFCI Loan	16,00,000	-	-	16,00,000
Total Loan Capital	2,72,00,000			2,72,00,000
D. Other Capital				
Total Capital raised and appropriated (A + B + C + D)	3,55,20,000	-	-	3,55,20,000

Statement – II
Statement of Capital Expenditure
For the Year ended 31st March 2024

Particulars	Balance at the beginning of the year Rs.	Additions during the year Rs.	Retirements during the year Rs.	Balance at the end of the year Rs.
A. Intangible assets	-	-	-	-
B. Hydraulic Power Plant	-	-	-	-
C. Steam Power Plant	-	-	-	-
Land	1,00,40,000	11,60,000	-	1,12,00,000
Building	70,00,000	10,00,000	-	80,00,000
Machinery, Plant etc.	81,00,000	19,00,000	-	1,00,00,000
	2,51,40,000	40,60,000		2,92,00,000

D. Internal Combustion Power Plant	-	-	-	-
E. Transmission Plant	-	-	-	-
F. Distribution Plant (HV):				
Mains	13,20,000	6,80,000		20,00,000
Accumulators	61,040	20,800		81,840
	13,81,040	7,00,800		20,81,840
G. Distribution Plant (L.V.):				
H. Public Lighting				
Public Lamps	4,28,000	52,000	-	4,80,000
I. General Equipments				
Loose Tools & Plant	1,61,520	14,000	-	1,75,520
Electrical Instruments	44,000	-	-	44,000
Office Furniture & Fittings	19,600	-	-	19,600
	2,25,120	14,000		2,39,120
Total Capital Assets in use	3,20,00,960	48,26,800		3,20,00,960

Statement – III

Statement of Operating Revenues

for the year ended 31st March, 2024

Particulars of Revenue	Corresponding amount for the previous year Rs.	Amount for the current year Rs.
A. Net revenue by sale of electricity:		
Domestic or Residential		25,20,000
Industrial		20,36,000
Public Lighting		5,00,000
Total revenue by sale of electricity		50,56,000
B. Miscellaneous revenue from consumers:		
Meter and other rents		1,36,400
C. Other revenues:		
Sale proceeds of scrap		800
Cash discount on purchases		5,600
Total other revenues		6,400
Total operating revenues (A + B + C)		51,98,800
Less: Total operating expenses as per Schedule IV		36,28,240
Net Surplus carried to Net Revenue Account – Statement X		15,70,560

Statement IV
Statement of Operating expenses
for the year ended 31st March 2024

Particulars of Revenue	Corresponding amount for the previous year Rs.	Amount for the current year Rs.
A. Hydraulic Power Generation	-	-
B. Steam Power Generation		
(a) Operation:		
Coal, carriage etc.		10,72,320
Oil, waste & other stores		1,45,040
Salaries of engineers & Officers		71,360
Wages		2,67,760
Total operations		15,56,480
(b) Maintenance:		
Repairs & Maintenance:		
Building		22,200
Plant		40,200
Total Maintenance		62,400
(c) Depreciation:		
Building, Plant etc.		7,20,000
Total generation expenses (a + b + c)		23,38,880
C. Internal Combustion Power Generation		
D. Power Purchased		
Total Production Expenses (A + B + C + D)		
		23,38,880
E. Transmission:		
F. Distribution (HV)		
(a) Operation and maintenance:		
Salaries of engineers & other officers		20,400
Wages		1,85,360
Repairs & Maintenance		87,360
(b) Depreciation		
		2,93,120

G. Distribution (M & LV)		
H. Public Lighting:		
(a) Operation & Maintenance:		
Attendance & Repairs		1,30,000
Renewals		44,000
		1,74,000
I. Consumers Servicing		
K. General Establishment Charges:		
Office Salaries		1,78,400
Rents		2,00,000
Rates & Taxes		1,53,440
General Office Expenses		1,20,000
Auditors fees		40,000
Law charges		12,000
Insurance		38,400
Total general establishment charges		7,42,240
L. Other charges		
M. Management expenses		
Directors remuneration		80,000
Total operating expenses transferred to Statement III		36,28,240

Statement X

Statemetn of Net Revenue and Appropriations Account

for the year ended 31st March 2024

Corresponding – Particulars figure of previous year	**Amount**	**Corresponding – Particulars figure of previous year**	**Amount**
To Contribution towards contingency reserve	1,60,000	By Balance of profit brought forward	32,160
To Debenture interest	10,44,000	By net operating surplus as per Statement III	15,70,560
To Proposed dividend	3,20,000	By Interest on investment	12,000
To Balance carried over	91,120	By Other receipts:	
		Share transfer fees	400
	16,15,120		**16,15,120**

Statement XI
General Balance Sheet as on 31st March 2024

Corres-ponding figure of previous year	Particulars	Amount	Corres-ponding figure of previous year	Particulars	Amount
	Capital raised & appropriated			Capital amount expended on	
	(Statement – I)	3,55,20,000		works in use (Statement – II)	32,000,960
	Reserve and Surplus:			Less: Depreciation fund	13,60,000
	Contingency reserve	5,60,000			30,640,960
	Balance of Net Revenue A/c			Current Assets:	
	Statement X	91,120		Stock in hand	25,28,000
	Current Liabilities &			Sundry Debtors	29,20,000
	Provisions:			Contingency Reserve	
	Creditors	5,50,020		Investment	4,00,000
	Proposed dividend	3,55,20,000		Bank balance	3,61,140
				Cash in hand	1,59,040
				Prepaid expenses	
		3,70,41,140			**3,70,41,140**

: UNSOLVED PROBLEMS :

Problem 1 :

Super Power electricity company laid down a main at a cost of Rs. 1,00,00,000. Some years later, the company land down an auxiliary main for one-fifth of the length of the old main at a cost of Rs. 30,00,000. It also replaced the rest of the length of the old main at a cost of Rs. 1,20,00,000 the cost of materials and labour having gone up by 15 percent. Sale of old materials realised Rs. 1,60,000 Old materials valued at Rs.2,00,000 were used in renewal and those 1,00,000 were used in the construction of the auxiliary main.

You are required to give the journal entries for recording the above transactions.

Problem 2 :

Hansraj Electric Supply Ltd. rebuilt and re-equipped one of their Mains a Cash Cost of Rs. 80,00,000. The old mains thus superceded cost Rs. 30,00,000. The capacity of the new Main is double that the old Main.

Rs. 1,40,000 was realized from sale of old materials. Four old motors valued at Rs. 4,00,000 salvaged fram the old Main were used in reconstruction. The cost of Labour and Materials is respectively 30% and 25% higher now than when the old Main was built. The proportion of Labour to Materials in the Main then and now is 2.3.

Show the Journal entries for recording the above transactions, if accounts are maintained under Double Account System.

Problem 3 :

The following balances have been extracted, at the end of 2024 from the books on **Pure Power Electricity Company.**

Particulars	Rs.	Particulars	Rs.
Share Capital	**2,00,00,000**	Consumer's deposits	8,000,000
Reserve fund (invested in 8% government securities at par)	12,000,000	Amounts contributed by consumers towards cost of fix assets	4,00,000
Contingencies reserve-invested in 7% State loan	24,00,000	Intangible assets	4,00,000
Loan from State Electricity Board	50,00,000	Tariffs and dividends:	
12% debentures	40,00,000	Control reserve	20,00,000
Development reserve	16,00,000	Current assets (monthly average)	30,00,000
Fixed assets	5,00,000		
Depreciation reserve on fixed assets	60,00,000		

The company earned a profit of Rs. 56,00,000 (after tax) in 2020. Show how the profits have to be dealt with by the company: assuming that the bank rate was 10%.

All working should from part of your answer.

Problem 4 :

The following balances relate to an **Unbreakable electricity company Ltd.** and pertain to its accounts for the year ended 31st December 2024.

Particulars	Rs.
Share capital	2,00,00,000
Reserve fund (invested in 5% Government Securities at par)	1,20,00,000
Contingencies reserve-invested in 6% State Government loans	40,00,000
Loan from State Electricity Board	60,00,000
11% debentures	16,00,000
Development reserve	20,00,000
Fixed assets	4,00,00,000
Depreciation reserve on fixed assets	1,60,00,000
Customers deposits	1,50,00,000
Amounts contributed by consumers towards fixed assets	4,00,000

Intangible assets	10,00,000
Tariffs and dividend control reserve	12,00,000
Current assets (monthly average)	40,00,000

The company earned a post tax profit of Rs.18 lakhs. Show how the profits of the company will be dealt with under the provisions of the Electricity Act, assuming that the bank rate during the years was 8%.

Problem 5 :

Big Power Electric supply Co. Ltd. gives you the following extract from its trial balance as on 31st March, 2024.

Particulars	Rs.	Rs.
Purchase of energy		62,25,000
Salaries and wages (includes wages to sub-station labour of Rs. 3,40,000 and distribution labour Rs. 2,50,000)		12,00,000
Repairs & Maintenance :		
Buildings	22,500	
Plant & Machinery	7,500	
Transformers	90,000	
Mains and services	5,10,000	
Lorries	18,000	6,48,000
Establishment expenses		19,95,000
Rent, rates and taxes		76,000
Conveyance and travelling		60,000
Audit fees		22,000
General Expenses		1,50,000
Director's fees and allowances		25,500
Interest on loans		3,52,000
Interest on consumer's security deposits		1,20,000
Electricity duty		10,50,000
Sale of energy		
Domestic	25,75,000	
Industrial	1,49,00,000	1,74,75,000
Rental of maters		1,05,000
Maintenance of public lamps (Cr.)		22,500
Hire on machines & goods		37,500
Misc. receipts		15,000
Net Revenue A/c (balance as on 1.4.2022)		75,350

The following adjustments have to be made :

i. Depreciation for the year (includes depreciation on building, plant etc, of Rs. 9,25,000) Rs. 17,25,000

ii. Provision for taxation Rs. 22,80,000

iii. Transfer to contingency reserve Rs. 2,25,000

iv. Transfer to Development reserve Rs. 1,20,000

The amount of reasonable return may be presumed to be Rs. 11,94,000.

You are required to prepare for the above period.

(a) Statement of operating revenues and statement of operating expenses

(b) Statement of Net revenue and appropriation account.

: EXERCISES :

Answer the following in brief :

1. What do you mean by double accounting system ? Explain the features of double accounting system.
2. What are the advantages and disadvantages of double accounting system ?
3. Distinguish between Double entry system and Double account system.
4. Explain in detail about the steps to prepare final accounts of Electricity Company.
5. Explain the following concepts in short:
   - Revenue account
   - Net revenue account
   - Capital account
   - General Balance sheet
6. Explain in detail about Receipt and Expenditure on capital account.
7. Write a short note on replacement of old asset with new asset.
8. How is the replacement of asset treated under the double account system ? Explain with the help of example.
9. How will you account for security deposit received from consumers by Electricity Company.
10. Briefly explain general principals of finance, audit and forms of financial statements of state electricity board.
11. What are the special features of final accounts prepared by electricity companies ?

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CHAPTER 6

Developments in Accounting

6.1 Environmental Accounting
a. Meaning and Significance of Environmental accounting
b. Corporate environmental reporting in India
6.2 Forensic Accounting
a. Meaning, Features, and Scope of Forensic accounting
b. Role of Forensic accountant, and essential skills required for a forensic accountant

6.1 Environmental Accounting :

Meaning: The term environment includes everything in all its manifest forms. On the earth, beneath the earth and above the earth. All over the world there has been much concern regarding management of environment for ensuring sustainable economic developments. Sustainable economic environmental development may be defined as the development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. It refers to preserving Eco-system as well as maintaining long-term profitability of the firm.

In order to be a good corporate citizen a firm has to adopt policies and take action that become environment friendly. The companies must develop strategies which translate actions into benefits, improve their environmental performance and meet the environment demands placed upon them by Government and shareholders.

The business activities of every enterprise are affected by a nation's natural resources, viz, water, air, minerals, forests, etc. or termed as environment in common parlance. Similarly, the functioning of an enterprise also affects the environment. Hence, it is necessary to maintain proper accounting records displaying the impact of a business enterprise on environmental and vice versa. Environmental accounting faithfully performs this function. It is a new concept and is gaining

continuous popularity because of greater environmental awareness. It is a method of recording environmental events. It includes the evaluation or natural resources measuring the income therefrom, keeping a record of the cost relating to them, estimating their quantities and providing depreciation on them. It includes management of environmental costs effectively presenting and disclosing environmental information in a suitable form.

Definition: Environmental accounting aims at achieving sustainable development, maintaining a favorable relationship with the community, and pursuing effective and efficient environmental conservation activities. These accounting procedures allow a company to identify the cost of environmental conservation during the normal course of business, identify benefit gained from such activities and provide the best possible means of quantitative measurement (in monetary value or physical units) and support the communication of its results.

Herein, environmental conservation is defined as the prevention, reduction, and/or avoidance of environmental impact, removal of such impact, restoration following the occurrence of a disaster, and other activities. The environmental impacts are the burden on the environment from business operations or other human activities and potential obstacles which may hinder the preservation of a favorable environment.

Forms of Environmental Accounting :

1) **Environmental Management Accounting (EMA):** It is an accounting with a particular focus on material and energy flow information and environmental cost information.

   Sub Systems : This type of accounting can be further classified in the following sub Systems :

   a) **Segment Environmental Accounting (SEA) :** This is an internal environmental accounting tool to select an investment activity, or a project, related to environmental conservation from among all processes of operations and to evaluate environmental effects for a certain period.

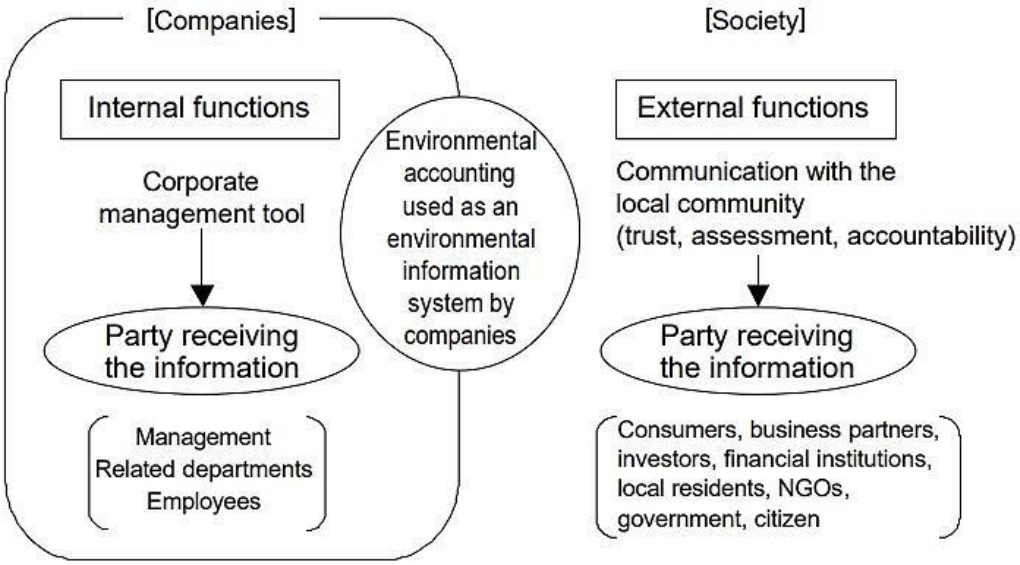
   b) **Eco Balance Environmental Accounting (EBEA) :** This is an internal environmental accounting tool to support PDCA for sustainable environmental management activities.

   c) **Corporate Environmental Accounting (CEA) :** This is a tool to inform the public of relevant information compiled in accordance with the Environmental Accounting. It should be called as Corporate Environmental Reporting. For this purpose the cost and effect (in quantity and monetary value) of its environmental conservation activities are used.

2) **Environmental Financial Accounting (EFA) :** This is a financial accounting with a particular focus on reporting environmental liability costs and other significant environmental costs.

3) **Environmental National Accounting (ENA) :** This is a national Level accounting with a particular focus on natural resources stocks and flows, environmental costs and externality costs etc.

Functions of Environmental Accounting : The functions of environmental accounting are divided into internal and external functions.



1) **Internal Functions :** As one step of a company's environmental information system, internal function makes it possible to manage environmental conservation cost and analyze the cost of environmental conservation activities versus the benefit obtained, and promotes effective and efficient environmental conservation activities through suitable decision-making.

Internal functions are carried out within a company. They assess the cost incurred by environmental conservation activities and the related benefits and are beneficial in improving the efficiency and effectiveness of environmental conservation activities and help in gaining an understanding of what impacts such activities might have on business operations. By using environmental accounting as an environmental information system, it plays the role of a tool to be employed by management and related business segments.

2) **External Functions :** By disclosing the quantitatively measured results of its environmental conservation activities, external functions allow a company to influence the decision-making of stakeholders, such as consumers, investors, and local residents.

External functions are effective in conveying information about a company's environmental activities to stakeholders. Environmental accounting data is made public

through environmental reports, and covers a company's stance on environmental conservation activities and concrete measures being taken by the company. By disclosing such information, society's trust and confidence in the company improves and aids in achieving a better public assessment. Therefore, environmental accounting not only fulfills a company's accountability to people outside the company, such as consumers, investors and local residents, but also facilitates attaining a fairer corporate assessment, not just from the standpoint of environmental conservation.

Advantages of Environmental Accounting:

a) **Discloses Utilisation of Natural Resources :** Environmental accounting is helpful in presenting in a transparent manner, the utilisation of natural resources of the country, the costs incurred to use them and the income earned therefrom.

b) **Social Contribution by Corporates:** Environmental accounting helps in measuring the contribution made by various corporations or companies in fulfilling their social responsibilities.

c) **Environmental Protection:** A business enterprise does not live in isolation. In order to maximize wealth, it takes support of social and ecological systems. Environmental accounting helps in measuring the extent to which a corporate enterprise has utilised the environmental resources. In any case, it has to be seen that a business enterprise in the course of their business activities does not vitiate, pollute or endanger environment. As a matter of fact, a number of laws have been enacted in our country to protect the environment.

Limitations of Environmental Accounting: The present format of national accounts does not provide a full economic value of environmental resources. The following are a few limitations:

1. **Non-recognition of Environmental Expenditure:** Expenditure incurred to protect the environment or preventing it from degradation cannot be separated from the SNA data as per the present system of national accounts.
2. **Non-marketed Goods and Services :** Environment provides certain goods which are of high value but are not sold in the market. These may include firewood, building materials generated in the forests, medicinal plants, etc. Some countries do not incorporate these goods in their national accounts. However, they compute the marketable value of similar products and use it as a basis for valuing non-marketed goods and services.
3. **Consumption of Natural Capital :** The system of national accounts treats the gradual depletion of physical assets such as plant and equipment as depreciation. However, depletion of natural capital particularly the forest is treated as income. This seems to be an inconsistent approach. It will be appropriate to treat the depletion of natural capital, on the same pattern of that of depletion of physical assets.

Significance of Environmental Accounting:

1. Environmental accounting encourages consumers and helps them purchase environmentally friendly products, i.e., green products produced by the corporate, and as such, both consumers and corporate benefit.
2. Corporate sectors can show their commitments towards introduction and change, and thus seem to be responsive to new factors. Countries giving importance to the ecological aspect of activities are becoming more and more popular, particularly in Western countries.
3. Environmental i.e. natural resources taking place in the production as inputs are revealed in this accounting system. Shadow prices of environmental resources are usually defined as the value added attributable to them in the activities.
4. Pollution control, as a burning topic of discussion, environmental accounting shows the extent to which pollution has been controlled by the corporate sectors.
5. Environmental accounting is of the utmost importance in answering certain queries, such as the extent of natural resources available in countries, what are the incomes arising out of them, what are the expenses incurred to protect the resources, what is its importance from the view of the nation, and at what values should they be shown in the nation's balance sheet, etc.
6. Environmental accounting is beneficial in another sense, which offers an idea about industrial development, a nation's economic progress and social welfare and the fulfillment of responsibility towards society.
7. The current national accounting practice does not duly consider the value of natural resources, and as such, it becomes a complicated issue to measure the interrelationship between environment and development. Environmental accounting is justified when the arguments related to market, society, etc., are considered.
8. Environment accounting helps in discharging organizational accountability and increasing environmental transparency. Sustainable development is possible with the help of environmental accounting as it helps include ecological ability of enterprise.
9. Negotiation between the environment and society is helpful to organizations which seek to strategically manage a new and emerging issue with different categories of users.
10. Corporate sectors may be successful in attracting funds from green individuals and new groups with the help of sustaining an environmentally-friendly green image.
11. In the global economy there is an existence of a strong environmental lobby against environmentally unfriendly industries. Green reporting can be used to combat effectively all negative public opinions.
12. Environmental accounting minimizes the risk stemming from the management of product liabilities. A business cannot fully include the necessary environmental changes until and unless accounting and finance do so.

13. Environmental accounting improves environmental performance through better management of environmental cost and thus, benefits the natural and human environments.
14. By minimizing environmental impacts through improved design of products, packages and processes, environmental accounting takes the competitive advantage. Inter and intra firm comparison reveals whether environmental costs are adequate or not.
15. Environmental accounting detects that part of the gross domestic product which exhibits the requisite cost to compensate for the negative impact of economic growth.
16. Environmental accounting estimates the total expenditure on production or enhancement of the environment. Companies seeking long-term profits are possible only when the ecological aspect in its business strategy and policy is considered.
17. Multinational bodies like the IMF, World Bank, UNO, etc., are looking for countries seeking their assistance to meet their environmental requirements.
18. Environmental accounting reveals true maximum income which accounting can actually consume without exhausting the stock of natural assets.
19. Government can use the data through the changes in financial budget and by other measures to achieve optimal allocation of scarce resources in the economy of a country.
20. Environmental accounting shows unsound production and consumption patterns, misuse and scanty use of resources and assets like water etc.
21. Optimal allocation of scarce resources in the economy is possible with the help of environmental accounting.
22. Environmental accounting discloses areas of soil and vegetarian deterioration through building construction in open areas due to increasing population pressures.
23. Comparison with conventional accounting discloses the main reasons for the change in net capital formation and the extent of substantiality of conventional accounting.
24. Through environmental disclosure practices, a company can show its commitments towards introduction and change, and thus appear to be responsive to new factors.
25. Environmental accounting helps negotiation and establishes the company's relationship with society in general and environmental pressure groups in particular. This helps an organization seeking to strategically manage a new and emerging issue with its stakeholders.

Corporate environmental reporting in India:

Need of Environmental Accounting at Corporate Level : It helps to know whether corporation has been discharging its responsibilities towards environment or not. Basically, a company has to fulfill following environmental responsibilities.

1. **Regulatory Requirements :** Meeting regulatory requirements or exceeding that expectation.
2. **Information :** Disclosing to the investors both potential and current, the amount and nature of the preventative measures taken by the management (disclosure required if the

estimated liability is greater than a certain percent say 10 per cent of the companies net worth).

3. **Operation :** Operating in a way that those environmental damages do not occur.
4. **Cleaning up Pollution :** Cleaning up pollution that already exists and properly disposing of the hazardous material.
5. **Control Over Efficiency Gains :** Control over operational and material efficiency gains driven by the competitive global market.
6. **Control Over Cost Increases:** Control over increases in costs for raw materials, waste management and potential liability.
7. **Promotion :** Promoting a company having wide environmental attitude.

Accounting Requirements For Environmental Accounting :

1. **Gazette Notification:** A Gazette Notification on Environmental Audit issued by the Ministry of Environment and Forests in 1992 (amended vide notification GSR 386 (E), dt.22-04-1993), under the Environmental (Protection) Act, 1986 has made it mandatory for all the industrial units to submit an environmental statement to the concerned State Pollution Control Boards while seeking consent to operate under the relevant environmental norms. The Environmental Statements enable the units to take a comprehensive look at the industrial operations, facilitate the understanding of material flows and help them to focus on areas where waste reduction and consequently saving in material cost, is possible.
2. **Provisions in Indian Companies Act :** Indian Companies Act, 1956 requires to include in Director's report environment related policies/problems and annexure showing details of energy consumption/ energy conservation.
3. **Cost Accounting Record Rules :** Cost Accounting Record Rules for various industries made by the Central Government also require disclosing monetary and quantitative values in Cost Accounting.

Legal Framework for Environmental Accounting in India :

While industrial licensing has been abolished for all practical purposes, environmental clearance from various Government authorities has now taken the centre stage. With increasing global concern over the protection of the environment, India too has set up a Union Ministry of Environment with the object of co-ordinating among the states and the various ministries, the environmental protection and anti-pollution measures. Necessary legislation has also been passed. The various laws relevant to environmental protection are as under:

a) Directly Related to Environment Protection :

- Water (Prevention and Control of Pollution) Act, 1974.
- Water (Prevention and Control of Pollution) Cess Act, 1977.

- The Forest (Conservation) Act, 1980.
- The Air (Prevention and Control of Pollution) Act, 1981.
- The Environment (Protection) Act, 1986.

b) Indirectly Related to Environment Protection :

- Constitutional Provision (Article 51A).
- Indian Port Act.
- Indian Penal Code.
- The Factories Act, 1948.
- Merchant of shipping Act, 1958.
- Indian Fisheries Act, 1987
- Hazardous Waste (Management & Handling) Rules, 1989.
- Public Liability Insurance Act, 1991.
- Motor Vehicle Act, 1991.
- The National Environment Tribunal Act, 1995.

Disclosure of Environmental Accounting Information : The active disclosure of environmental accounting information is done via an environmental report in regard to the external functions of environmental accounting. The following environmental accounting elements should be disclosed.

1. Significant Environmental Accounting Policies :

a. Status :

i) **Target period** : If the target period differs from the business year, the reason should be stated. In addition, a company within a corporate group records its environmental accounting activities for a differ period of time, then the name of the company and the target period must be stated.

ii) **Aggregation calculations** : If the scope of the corporate group and the scope of its consolidated financial statements differ, the criteria for defining the corporate group should be stated.

b. Aggregation Criteria for Environmental Conservation Cost :

i) **Aggregation depreciation** : In the event that depreciation of capital investments is included in cost, both the investment and cost should be posted as an environmental conservation cost.

ii) **Criteria for posting complex cost** : If various methods of calculation are employed depending on the type of cost, each method and the main costs involved should be stated.

c. **Measuring Criteria Environmental Conservation Benefit :**

i) Scope of the benefit : It should be stated whether the scope of benefit covers the decrease in environmental impact during the use of a product or service derived from business activities, or the decrease of impact during waste disposal. The method of calculation and the basis for the calculation should be also stated.

ii) Period in which the benefits of the investment appear, and the basis of this period.

iii) Basis for units of measurement.

d. **Measuring Criteria for Economic Benefit Associated with Environmental Conservation Activities :**

i) Scope of benefit : It should be stated whether the scope of benefit only applies to actual benefit or if it also includes estimated benefit.

ii) Period in which the benefits of the investment appear, and the basis of this measuring.

e. **Revision to Significant Environmental Accounting Policies :**

If a change is made to the significant environmental accounting policies, the status, reason and impact of the change should be stated.

2. **Total Information of Environmental Accounting :** To promote understanding among stakeholders, it is effective to state both environmental conservation targets and the progress being made with environmental conservation activities. In addition, to promote understanding of past environmental conservation activities, it is effective to disclose information covering three to five fiscal years.

a) The content of environmental conservation cost and environmental conservation activities.

b) Environmental conservation benefits.

c) Economic benefit associated with environmental conservation activities.

3. **Description of the Results of Environmental Accounting** : A company states the self-assessment on actual results and fluctuations with results from the previous fiscal period, and future direction to apply the environmental accounting for environmental conservation activities. For better understanding among stakeholders, a company should assess its own analysis from the following perspectives.

a) **Description of relationship to corporate business circumstance** : In the event of a major change in a company's business circumstance, such as due to merger, spinoffs, opening/closure of a plant, fluctuation in earnings, or the large-scale consignment of operations, the company should explain both the status for the

change and the impact this has on current and future environmental accounting performance.

b) **Description of relationship to environmental impacts and environmental conservation activities** : If abnormally large amounts or notable changes are observed in its environmental impacts (including sudden occurrences during the current period such as environmental degradation), the reasons should be described. One example is when R&D costs stand out among environmental conservation costs, or if there is a significant decrease in CO2 emissions among its environmental conservation benefits.

c) **Description of relationship to past environmental conservation activities** : As a company carries on with environmental conservation activities, the benefit from additional spending for environmental conservation tends to produce less benefit per amount. A company that has made vast progress in environmental conservation activities, are likely to find it more difficult to generate benefit. In this situation, environmental accounting results achieved in the current period should be described to tie in with past environmental conservation activities.

4) **Correlation with Other Environmental Report Elements** : To promote further understanding of environmental accounting, the page of correlating topics found in the environmental report should be stated. In addition, if guidelines other than these guidelines were used, it should be specified.

6.2 Forensic Accounting :

Introduction : Forensic Accounting (FA) is the combination of the Accounting, Auditing and Investigation skills. The term "forensic accounting" was first used in 1946 by Maurice E. Peloubet; a partner in a New York based accounting firm. The word forensic is derived from the Latin word forensis'. It refers as assistance in disputes regarding allegations or suspicion of fraud. Which are likely to involve litigation, expert determination and enquiry by an appropriate authority and investigations of suspected fraud and irregularity, which could potentially lead to civil, criminal or disciplinary proceedings.

Cracking down on fraud is critical for a country that needs investment. Forensic accounting is the area which is called upon to address the issues of prevention and investigation of white collar crimes. In the emerging economic scenario, forensic accounting also known as forensic auditing is a vital tool for finding of financial crime and the direction of justice, providing decisive information about the facts found related to financial crime. Forensic accounting is hardly a new field, but in recent years, banks, insurance companies and even police agencies have increased the use of these experts. The increase in white collar crime and the hitches faced by law enforcement

agencies in finding fraud have also contributed to the growth of the profession. A key piece of proof is the report of the forensic accountant. India is hitherto to meet the growing demand for fraud examiners because of a shortage of training institutions; Demand for fraud examiners is growing fast because of the use of information technology to commit crimes, growing business competition. Opportunities for forensic accountants are increasing rapidly in recent years due to a rise in white collar crime.

Forensic accounting has risen to prominence because of increased financial frauds are popularly known as white collar crimes. Forensic accounting can be described as a specialized field of accountancy which investigates fraud and analyze financial information to be used in legal proceedings. Forensic accounting uses accounting, auditing and investigative skills to conduct investigations into theft and fraud. It encompasses both Litigation Support and Investigative Accounting. "Forensic" means "suitable for use in a court of law", and it is to that standard and potential outcome that forensic accountants generally have to work. Forensic accountants, also referred to as forensic auditors or investigative auditors, often have to give expert evidence at the eventual trial.

According to the Journal of Forensic Accounting, “Forensic accounting is sufficiently thorough and complete so that an accountant, in his/ her considered independent professional judgment, can deliver a finding as to accounts, inventories, or the presentation thereof that is of such quality that it would be sustainable in some adversarial legal proceeding, or within some judicial or administrative review.” Forensic accounting falls within the context of our environmental needs. That is, to give forensic assistance in accounting issues.

Meaning : “Forensic accounting is the application of accounting principles, theories and discipline to facts or hypotheses at issues in a legal dispute and encompasses every branch of accounting knowledge.” The system of financial reporting and the accounting and auditing profession are often accused because of the appearance of frauds and the loss of trust in the reliability of financial information. Great financial frauds at the end of the past and the beginning of this century have imposed the need for deeper investigation of irregularities in the area of financial reporting. Forensic Accountants are related with deterring, detecting and investigating frauds in financial reporting. Forensic accounting, sometimes called investigative accounting is the application of an expert knowledge and specific skills to spot transactions which are not authentic. It is used for fraud examination and fraud examination covers fraud allegations from inception to disposition, including obtaining evidence, interviewing, writing reports and testifying.

Forensic Accounting assists an organization in legal matters in two ways :

- Investigative Accounting deals with the investigation of criminal matters relating to employee theft, securities, fraud, insurance fraud etc. and also includes provisions and suggestions regarding possible courses of action.

- Litigation Support involves the quantification of the amount of economic damages and also providing accounting assistance in litigation matters.

Forensic accounting may consists of the following two major components :

- In case of court case, investigative skills of forensic accountant are used in two ways, he can be called upon to give his expert opinion based on his investigation and may require possible courtroom evidence.
- Forensic accountant's investigative skills are required for collecting, analyzing and evaluating financial evidence, as well as the ability to understand and communicate findings. It is a mechanism to detect and prevent corporate frauds and scams; forensic accounting has emerged as relatively new and effective tool in the hands of accountants to find out mistakes and malpractices in accounting. Forensic accountants are recruited by law firms, corporations, banks, government agencies, insurance companies and other organizations to analyze, interpret, summarize and present complex financial and business related issues in a simple and concise manner. Forensic accountant may apply certain examination and evaluation techniques similar to those used in financial audits but the objective of these procedures is quite different.

Definitions :

KPMG (1999) : Forensic accounting as assistance in disputes which are likely to involve litigation, arbitration, expert determination, mediation or an enquiry by an appropriate regulatory authority, and investigation of suspected frauds, irregularity or impropriety which could potentially lead to civil, criminal or disciplinary proceedings; while focusing primarily on accounting issues.

Chilvers (2000) : Defined "Forensic Accounting" as the use of investigative techniques, integrated with accounting and business skills, to develop information and opinions for evidence in court and for use by expert witnesses.

Williams, (2002) : Forensic accounting is recognized as a form of professional expertise and endowed with specific attributes; the recognition comes from possessing a formal certification in forensic accounting which provides symbolic value.

Crumbley, Heitger, & Smith, (2005) : Forensic accounting is the specialty area of the accountancy profession which describes engagements that result from actual or anticipated disputes or litigation. "Forensic" means "suitable for use in a court of law," and it is to that standard and potential outcome that forensic accountants generally should work.

Howard and Sheetz (2006) : Forensic accounting is the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert. Hopwood, Leiner, and Young (2008) argued that forensic accounting is the application of investigative and analytical skills for resolving financial issues in a manner that meets standards required by courts of law.

Arokiasamy & Cristal, (2009) : Forensic accounting is a science dealing with the application of accounting facts and concepts gathered through auditing methods, techniques and procedures to resolve legal problems which require the integration of investigative, accounting, and auditing skills.

Dhar and Sarkar (2010) : Defined forensic accounting as the application of accounting concepts and techniques to legal problems. It demands reporting, where accountability of the fraud is established and the report is considered as evidence in the court of law or in administrative proceedings. It is concerned with the use of accounting discipline to help determine issues of facts in business litigation.

The America Institute of Certified Public Accountants (AICPA) (2010) : Defines forensic accounting as services that involve the application of specialized knowledge and investigative skills possessed by Certified Public Accountants. Forensic accounting services utilize the practitioner's specialized accounting, auditing, economic, tax, and other skills.

Singleton and Singleton (2010) : said forensic accounting is the comprehensive view of a fraud investigation. It includes preventing frauds and analysing antifraud control which includes the gathering of nonfinancial information.

Webster's Dictionary : The term "Forensic" means, "Belonging to, used in or suitable to courts of judicature or to public discussion and debate." The word accounting is defined as "a system of recording and summarizing business and financial transactions and analyzing, verifying, and recording the results."

George A. Manning : "Financial Investigation and Forensic Accounting" defines Forensic Accounting as the science of gathering and presenting financial information in a form that will be accepted by a court of jurisprudence against perpetrators of economic crimes.

Significance of Forensic Accounting And Scams In India : Recently, forensic accounting has become an indispensable tool for investigation in India due to rapid increase in corruption and our law enforcement agencies do not have the expertise or time to uncover such stock market fraud or bank fraud or cyber fraud. It has come to limelight only recently due to rapid increase in white-collar crimes and the belief that our law enforcement agencies do not have sufficient expertise or the time needed to uncover frauds. It is being used in banks, insurance companies and even police agencies. But India has witnessed hundreds of scams since independence.

According to the Corruption Perception Index 2016 Report released by Transparency International, India's rank is 79th among 176 countries affected with corruption. However, in 2019 their Corruption Perception Index, ranked the country 80th place out of 180, reflecting steady decline.

Some of the scams worth mentioning here are as follows :

Haridas Mundhra	(1957)	cash for votes	(2008)
Nagarwala	(1971)	Satyam	(2009)
Antulay and cement	(1982)	2-G Spectrum	(2010)
Bofors	(1989)	Commonwealth Games	(2010)
Fodder Scam	(1990)	Adarsh Housing Society	(2010)
The Hawala Scandal	(1991)	housing loans by banking and financial institutions	(2010)
Harshad Mehta	(1992)	Belekiri port in Karnataka	(2010)
Palmole in oil imports in Kerala	(1992)	food grains in Uttar Pradesh	(2010)
Telgi	(1995)	Bellary mines (Debroy & Bhandary)	(2011)
SNC Lavalin in Kerala	(1995)	Tatra truck Scam	(2011)
Sukhram and telecom	(1996)	Indian Coal Allocation Scam	(2012)
fodder in Bihar	(1996)	Wakf Board Land Scam	(2012)
Jain hawala	(1997)	Chopper Scam	(2013)
Ketan Parekh	(2001)	Railgate scam	(2013)
the Barak missile	(2001)	Uttar Pradesh NRHM scam	(2013)
Kargil coffins	(2002)	Jayalalithaa assets case	(2014)
Taj corridor	(2003)	Vijay Mallya & Kingfisher Airlines	(2016)
PDS scam in Arunachal	(2004)	PNB Scam or Nirav Modi	(2018)
oil for food	(2005)	PMC Bank scam	(2019)
102 stamp papers	(2005)	Laxmi Vilas Bank	(2019)
Scorpene submarine deal	(2006)	Roop Bhansali Scam, Subrata Roy, Saradha Scam NSEL Scam	

Need for Forensic Accounting : Given the day and age, there is no realm that is immune to dishonesty, fraudulence and oppression. Forensic Accounting challenges such acts and hence has penetrated various sectors that are infested with financial treachery. The need and demand for Forensic Accountants is increasing in the following areas :

- **Detection of Fraud by Employees Within an Organization :** On speculations of misconduct of an employee, an organization may engage a Forensic Accountant to fish out the truth. They trace any fraud by going through the books and papers of the company as well as the activities of the employee. They also tactfully interview the accused and review evidence of assets created out of such fund embezzlement.
- **Criminal Investigation :** Where fraud is already established and criminal proceedings are in line, a detailed report containing financial implications made by a Forensic Accountant is of unparalleled assistance to the Police and Law society.

- **Settlement For a Retiring Partner :** If a retiring or otherwise outgoing partner of a firm complaint of an unjust settlement, he, with the help of a Forensic Accountant, can get assets and liabilities gauged properly and if need be, institute proceedings for resettlement.
- **Cases Relating to Professional Negligence :** Whenever due to the negligence of an employee, generally accepted standards of accounting and auditing are not complied with or an ethical code is breached, Forensic Accountants are called upon to quantify the extent of loss arising from such deficiency in service.
- **Arbitration and Other forms of Dispute Settlement:** Forensic Accountants are specially trained in alternative dispute resolution. They help the business community mend differences using tools of arbitration and mediation. Apart from that, they also help settle contract disputes, liability claims, intellectual property infringements, construction breaches etc.
- **Settlement Regarding Motor Vehicle Accidents:** The expertise of Forensic Accountants is useful in quantifying losses arising out of motor vehicle accidents. They are well acquainted with laws as a part of their curriculum.
- **Settlement of Insurance Claims :** Claims relating to consequential loss, property loss, due to various risks, fidelity insurance are handled by a Forensic Accountant. They are also sought when policyholders wish to challenge settlement claims by insurance companies and accurately assess them as well.
- **Settlement of Disputes Arising Out of Matrimony:** Forensic Accountants indulge in the valuation of assets in matrimonial disputes and their function is limited to locating, tracing and evaluation of the same.

Importance of Forensic Accounting: Forensic accounting is a vital and important part of the justice system. By providing accurate and reliable information, forensic accountants help to ensure that justice is served. Forensic accounting can be used in civil and criminal cases and can provide critical information in a wide variety of legal proceedings. There are many benefits to using forensic accounting, including the following:

- **Enhanced Efficiency:** Forensic accountants play a crucial role in examining and investigating current financial processes and standards, which can help identify more effective and efficient solutions. The whole process is one of detecting problems and areas of improvement for the benefit of the business.
- **Aids Businesses in Managing Finances:** Businesses can use forensic accounting to detect anomalies among their staff and the third parties they're working with. For instance, a company can ask a forensic accountant to check an employee's purchasing records to see if all of his purchases were for business use or if he diverted some for his personal use.
- **Minimal Loses:** The primary benefit of forensic solid accounting is how it can minimise and prevent unnecessary loss. Fraudulent activity and general financial discrepancies

cost the business community extraordinary sums of money every hour of every day. The forensic accountant ensures this isn't allowed to happen.

- **Reduces Risk of Exploitation :** By proactively patching any obvious 'gaps' in current financial, operational standards, the forensic accountant can ensure that the risk of future exploitation is significantly reduced. It's a case of protecting the best interests of the business before fraudulent activity can take place.
- **Enhanced Authority and Better Brand Reputation :** A brand that leaves itself wide open to manipulation and fraud is a brand that is very difficult to respect, trust, and work with. Fraud can do the kind of reputational damage that is borderline impossible to repair. Therefore, the importance of thorough and ongoing forensic accounting cannot be denied.
- **It helps in avoiding legal issues :** Forensic accounting is required for companies that have been involved in litigation, but also for companies that suspect fraud and do not have the time, personnel, or funding to hire a forensic accountant. In a small company, if you suspect fraud, it is advisable to hire a forensic accountant to investigate the potential for fraud
- **Dealing with fraud :** (internal or external) can be spectacularly disruptive and costly for the business. In an ideal situation, forensic accountancy can be used to avoid such scenarios from ever occurring by both preventing fraudulent activity and nipping any problems detected in the bud.
- **Can be Used to Monitor Professionals :** Forensic accounting can be used to assess the work of professionals, including accountants themselves. The findings from this assessment, in turn, can be used to file professional negligence claims against those who have been proven to have made critical errors (whether intentionally or not).

Scope : Due to An increase in white collar crimes and frauds, scandals in public as well as private sectors, there is a wide scope for forensic accounting in India. Forensic accounting covers two far-reaching areas of practice. These are litigation support and investigative accounting. Thus, forensic accounting rendezvous and investigation is typically substantially longer than any other investigation. The scope of Forensic Accounting is much more broadened, specific and elaborated as equate to Financial Accounting & Auditing.

- **Bank Forensic Audits :** Current turmoil in the Banking sector provides huge opportunities for the forensic auditors. There is a huge demand for the services of forensic audits where the accounts are required to be classified as wilful defaulters. Most of the Public Sector Banks require the forensic audits of their borrowers to be done to identify if its a business loss or a wilful default. As the bankers are under continuous stress from various investigating agencies, forensic auditing is becoming a essential.

- **Insolvency Cases :** Banks are now knocking the doors of the National Company Law Tribunal for further actions against the borrowers which are not paying their dues. Many of these cases are filed under the insolvency laws.
- **Economic Offenses Wings :** Typically where the pyramid schemes, ponzi schemes or money circulation schemes are registered under various statutes with the local law enforcement agencies, their economic offenses wings typically ask the forensic auditors to work with them to assess the exact amount of damage.
- **Serious Fraud Investigation Office:** Sometimes the serious fraud investigation office also seeks the help from the Forensic auditors to investigate various facets of the corporate frauds. Digital forensic plays a key role in such investigations.
- **Securities Exchange Board of India :** In the crackdown against the shell companies, fraudulent prospectus application and insider trading, SEBI one of the most powerful regulators of Indian capital market requires the help of forensic auditors.
- **Criminal investigations :** Forensic accountants may often help concerned parties discover potential financial crimes, report them to relevant authorities, prevent them if possible and retrieve lost funds. They may help resolve or investigate financial crimes such as:
  - **Embezzlement :** Embezzlement happens when you entrust a person to manage, secure or use property or finances and they steal or misuse it. The person who embezzles may have permission to use the resources, though not to misspend them.
  - **Employee theft :** Employee theft is the unauthorised use, theft or misuse of an employer's resources. This could include theft of funds, trade secrets or merchandise.
  - **Insider trading :** Insider trading is when someone with private or insider information about a publicly listed company buys or sells its stock.
  - **Identity theft :** Identity theft happens when someone uses another's personal information, such as their name, ATM pin or credit card number, to conduct fraud or steal from them.
  - **Investment or securities fraud :** Securities fraud is a dishonest practice in the stock or commodities market that encourages investors to buy or sell shares by presenting them with incorrect information.
  - **Market manipulation :** Market manipulation is the act of intentionally raising or lowering the value of a stock or otherwise influencing the performance of the market for personal gain.
  - **Money laundering :** Money laundering is a way of hiding criminal activity and converting the income from unlawful activities into legitimate money.

- **Tax evasion :** Tax evasion or tax fraud is a criminal offence in which a person or company knowingly either avoids paying or underpays their fair share of taxes by concealing actual income or showing false expenses.

- **Others :** The scope of Forensic Accounting covers additional points.
  - Forensic accounting helps to gathers proofs and investigates the tactics, litigation procedures to construe the results
  - Forensic accounting designs and performs statutory audit procedures for risk reduction of the business
  - Design accounting processes for verifying important premises and data. A forensic accounting orientation also calls for skills in identifying possible fraud.
  - Forensic accountant or auditor acts as an advisor to the audit committee
  - Forensic accountant helps in the research activities of the investment analyst, economic Offences Wings also required during the Due Diligence in case of Mergers and Acquisition. Cover a wide assortment of businesses and locations that require uninterrupted surveillance of all transaction processing systems.
  - Forensic accountant detects fraud by analyzing the financial matters, financial statements, financial reporting systems, management information systems, company's method of operations, business structure, accounting principles and by following internal and external auditing procedures.

Forensic Accountant: A forensic accountant's services may be needed by different types of individuals, institutions, industries, or organizations for the purpose of collecting financial evidence. 'Forensic accountants work for commercial clients, legal professionals, insurers and regulatory authorities. They undertake fraud and other financial investigations from an accounting angle. The work of a forensic accountant is to enable lawyers, insurance companies and other clients to resolve disputes and assist in fraud investigations. Equally important is the ability to communicate financial information clearly and concisely in the courtroom. This evidence can be used in court to settle a dispute or to support or negate claims for indemnification regarding losses sustained and to seek justice or redress against fraud perpetrator(s) for betraying trust and confidence.

- The objectives of a forensic accountant will vary according to the purpose of the hiring individual or entity; the main essence is to uncover fraud, crimes, and evasions of financial obligations or malpractices committed through manipulation of accounting records.
- In some cases fraud detection is necessary to uncover the identity of the perpetrator. Financial documents will be used as evidence to support the filing of a lawsuit to prohibit the culprit from causing further damage as well as to seek indemnification if the

identity of the person(s) responsible is established. Establishing identities include those who connived with the main perpetrator, and the extent of their participation will likely be established.

- Establish the methods used to carry out the fraudulent or criminal acts committed by manipulating the concerned entity's accounting records. These are the instances when such methods are carried out with subtlety that they require extensive and intensive investigations to prove that fraud or economic sabotage is indeed being committed.
- Determine the extent of economic losses or damages sustained and gather the financial records that will serve as strong evidence to sustain legal claims for recovery.
- Know of any other potential losses that may be impending or imminent and seek possible solutions to prevent such losses from actually happening.
- Trace and locate any lost assets for purposes of recovery or which may be instrumental in tracking the fraudster. Unaccounted assets and locating their physical existence may also be essential to the settlement of a dispute. context of statutory audit and mandatory for public and private companies. It follows a set of rules & guidelines prescribed & regulated by Financial Accounting Standard Board (FASB). Auditing is simply examining prepared financial statements as per the need of the management.

Role of Forensic Accountant : Forensic Accountants can be engaged in Public Practice or employed by insurance companies, banks, police forces, government agencies and other organizations. Forensic Accountants are part investigator, part auditor, part solicitor and part accountant. Forensic Accountants utilize an understanding of business information, financial reporting systems, accounting and auditing standards, evidence gathering, investigation techniques and litigation procedures to perform their specialized role. As an investigator a professional forensic accountant can be seen as those who are specialist in fraud detection, and particularly in documenting exactly the kind of evidence required for successful criminal prosecution; able to work in complex regulatory and litigation environments; and with reasonable accuracy, can reconstruct missing, destroyed, or deceptive accounting records. Finally, as an appraiser, forensic accountants should be able to reliably express informed opinion on matter of business value, based on generally accepted theory; effective at evaluating the historical and projected degrees of risk and return of any going concern as well as any and all financial transactions involving assets, property taxes, and equities.

A forensic accountant is often retained to analyze, interpret, summarize and present complex financial and business information in a manner, which is both understandable and properly supported. A forensic accountant is time and again involved in the investigating and analyzing financial evidence development of computerized application to assist in the analysis and presentation of financial evidence communicating their findings in a form of report exhibits and

collection of document and assisting in legal proceedings, including testifying in court as an expert witness and preparing visual aids to support trial evidence. The role of forensic accountant can be explained with the following points:

- **Advice :** Giving preliminary advice as an initial appraisal of the pleading and evidence available at the start of proceedings.
- **Identification of key documents :** Identifying the key documents which should be made available as evidence. This is important when the forensic accountant is acting for the defense and lawyers are preparing lists of documents to tender in court.
- **Preparation of report :** Preparing a detailed balanced report on quantum of evidence, written in a language readily understood by a non-accountant and dealing with all issues, irrespective of whether or not they are favourable to the client.
- **Review of reports :** Reviewing the expert accounting reports submitted by the other party which may have impact on the quantum of evidence and advising lawyers on these reports.
- **Initiative in Environmental accounting :** The other plane of the forensic accountant can initiate measure for introduction of environment accounting to highlight the damage done to the environment by the possible recoupment of such damages or replenishment of lost properties through environmental management continually. The occupational fraud committed by employees usually involve the theft of Assets and embezzlement and the involvement of employees in kickback schemes or conversion of corporate assets for personnel use, the forensic accountant can intervene and observe the suspected examination of assets, invigilation, inspection or documents and interview of those involved to control such practices.
- **Briefing :** Briefing legal counsels of the financial and accounting aspects of the case during pre-trial preparation.
- **Criminal investigation :** Besides, the forensic accountant will also engage himself in criminal Investigation on behalf of Police Force, where his report is prepared with the objective of presenting evidence in a professional and concise manner. These assumptions often involve a detailed analysis of numerous years accounting records to qualify the issues in dispute. He does need an understanding of legal issues of business activities.
- **Suggestions :** Experience and these type of engagement enables the forensic accountant to offer suggestions as to internal control that owners could implement to reduce the likelihood of fraud.
- **Other roles :**
  - Investigating financial accounts for illegal activity such as white-collar crime.

- Interprets findings of an investigation to determine if there's a problem.
- Examines financial data regarding alleged criminal activity such as fraud, money laundering, illegal transactions and embezzlement.
- These financial records may include bank accounts, records or financial transactions.
- Using knowledge of the law and accounting to determine whether there is fraudulent activity.
- Working with law enforcement, private investigators or lawyers while conducting investigations.
- Testifies in court about the investigation.
- Assist the courts, solicitors and clients to understand the complex financial and accounting issues and presenting that information in a manner that all users can understand.

Forensic Accountants helps at a number of different levels in the litigation process including :

- Assisting in early discovery
- Applying our commercial knowledge and expertise
- Providing expert evidence both written and oral
- Independence
- Criminal Investigations
- Shareholders' and Partnership Disputes
- Personal Injury Claims / Motor Vehicle Accidents
- Business Interruption / Other Types of Insurance Claims
- Business/Employee Fraud Investigations
- Matrimonial Disputes
- Business Economic Losses
- Professional Negligence
- Mediation and Arbitration

Application of Forensic Accounting by Forensic Accountants:

- Fraud and white-collar crime investigations
- Criminal and civil investigations
- Preparation of expert reports, reviews and evidence
- Testifying as an expert witness
- insolvency and liquidation support investigation
- Fraud prevention and awareness strategies

- Fraud and fund tracing
- Civil and criminal actions regarding fraud and financial irregularities
- Breach of contract
- Breach of warranty, particularly on company acquisitions
- Insurance claims
- Liquidation support
- Regulatory enquiries
- Special and confidential investigations
- Financial Surveillance
- Anti-Money Laundering Programs
- Fraud and risk management surveys and reports
- Background checks

Responsibilities of a Forensic Accountant : As a forensic accountant, you might often utilise your skills to perform detailed investigations to discover information, find particular differences in financial papers and calculate exact losses. Here are some responsibilities that forensic accountants may fulfill.

- **Anti-fraud risk assessment :** Financial accountants may evaluate financial documents and procedures to focus on areas that could likely be fraudulent. They may help with internal audits, response strategies and fraud prevention while taking moral and legal factors into account.
- **Due diligence in legal contracts :** Forensic accountants often examine contracts and royalty deals to detect fraud and misuse. They generally show due diligence by considering ethical, legal and regulatory practices while carrying out financial investigations on all parties involved in contracts and related paperwork.
- **Bookkeeping investigation :** Forensic accountants usually examine accounting data and transactions to look for misrepresented or dishonest activities. To track illegal acts such as bribes, theft and fraud, forensic accountants may often analyse corporate, retail and personal finances.
- **Investigation of insurance claims :** Forensic accountants may review information relating to insurance claims to determine if payments made by insurance firms follow policy conditions. They detect frauds with the help of modern computing tools, along with legal and financial documents.
- **Litigation discovery process :** Forensic accountants may gather financial data to prepare for trials in civil and criminal cases. They may collect all relevant documents and present them to lawyers and court authorities at hearings, trials and arbitrations as part of the litigation discovery process.

- **Trial testimony :** Forensic accountants may testify for plaintiffs or defendants in both civil and criminal cases. Forensic accountants who are investigating fraud, embezzlement or tax evasion may also give verbal testimony of their conclusions.

Essential Skills required for a Forensic Accountant : Forensic accountants are generally knowledgeable in financial, legal, regulatory and investigative processes and maintain impartiality during an investigation and when serving as litigation support. To accomplish their duties and responsibilities, forensic accountants usually require the following skills :

- **Analytical Skills :** A forensic accountant may require strong analytical and research skills, including data analysis and critical thinking capabilities to help them during investigations of fraud and other financial crimes. They must assess the legitimacy of each transaction and decide if the firm reported the transaction honestly when they study financial records and other related documents. The paperwork may not always back up the statistics in the reports. The forensic accountant must determine where the figures on the reports originated from and if the firm has reported them properly. To properly conduct financial investigations, these experts must have excellent analytical talents, including data analysis and critical thinking capabilities.
- **Communication Skills :** Forensic accountants usually require effective communication skills to appear as expert witnesses, write financial reports and question witnesses. They typically use non-technical language to collect details of a case to speak with witnesses, investigators and others. Forensic accountants need communication skills for more than just interviewing people. They need to be able to clearly communicate their conclusions in both oral and written forms. They may work closely with law enforcement or court officials. Some forensic accountants act as expert witnesses, and this means they must have the ability to summarize complex and sometimes technical ideas for a jury and clearly explain their bearing on the overall case. Strong writing and speaking skills are critical for a forensic accountant. Forensic accountants must have excellent writing and speaking abilities.
- **Creative Thinking and Problem Solving Skills :** It is important for people in forensic accounting to be adaptable and solve problems effectively. The course of an investigation may change quickly based on new information or some other factor. A forensic accountant needs to have the creativity to imagine various scenarios and possibilities and consider whether they are consistent with the evidence.

  Some people may think of accounting jobs as involving people working with numbers and largely alone, but working as a forensic accountant is far from a solitary position. Combining the attention to detail of traditional accounting jobs with strong people skills, forensic accounting is a field that can offer an interesting and challenging

future. Forensic accountants are often called upon to assist businesses and other organizations in avoiding financial fraud, in which case they must understand and employ the best strategies for preventing fraud in the first place.

- **Attention To Details :** Forensic accountants must be meticulous in their work. Examining financial reports and other supplementary papers necessitates looking at vast amounts of data. They cannot afford to miss minor information since the outcome of a case might be determined by small information. The process of detecting financial anomalies and identifying tiny disparities that might suggest a broader pattern of fraud necessitates a high level of concentration and attention.
- **Persistence :** Because financial crimes are not always obvious, one of the most important forensic accountant traits is patience. Fraud traces are frequently well-hidden, and forensic accounting investigations can move at a glacial pace. To avoid becoming upset and striving to speed up the inquiry, patience is required.

  In some cases, when there are not enough supporting documents furnished with the financial reports, the forensic accountant has to keep requesting the documentation in order to find the source of reported data. Forensic accountants must continue to request documents and information until they can reach a firm conclusion. A stronger forensic accountant has the patience to look at everything and pick out every detail since they are more likely to establish a stronger case when they do.
- **Tech Savvy :** As technology plays a greater role in the industry, forensic accountants will need to be more computer savvy. Computer forensic accountants, in particular, require excellent computer abilities in order to perform cyber forensic investigations and utilize data analysis tools. Computers and other gadgets are used extensively in their work to detect and evaluate false financial data. As technology advances, forensic accountants will need to keep up to stay as informed as to the perpetrators of the financial crime they are investigating.

  A forensic accountant must have strong analytical and investigative abilities, as well as a thorough understanding of accounting and legal knowledge, as they are frequently called as an expert witness during trials. They require sophisticated abilities and expertise in areas such as investigation and auditing.
- **Detail-Oriented Approach:** Like all types of accountants, forensic accountants must be detailed-oriented. The process of detecting financial irregularities and noting small discrepancies that can indicate a larger pattern of fraud requires careful focus and attention. Forensic accountants spend a lot of time looking at and interpreting numbers. Furthermore, they also need to carefully document their investigation in an organized fashion.

- **Interviewing Skills :** The work of a forensic accountant is not limited to pouring over documents. They may also gather evidence or seek to better understand a situation by interviewing people. In some cases, these people may be under a significant amount of stress, and a good forensic accountant can put them at ease and draw out necessary information. Forensic accountants also need to be able to detect when a person is not being truthful and when they need to push for more information. Good listening skills are an important part of good overall interviewing skills that forensic accountants should also have.
- **Other Essential Skills :** Forensic Accountant must also possess following skills.
  - **Auditing skills:** Many forensic accountants often require expertise in auditing to evaluate financial documents, identify discrepancies or faults in these records and investigate suspected fraud.
  - **Computer skills :** As technology can play a bigger part in the business, forensic accountants may require excellent computer skills to conduct cyber investigations and handle big data analysis.
  - **Investigative skills :** Forensic accountants generally rely on their investigation skills and attention to detail while performing duties like looking into bookkeeping fraud and preparing legal cases.
  - **Organisation skills :** Forensic accountants may frequently work with a wide range of documents and investigate various cases. This often requires them to organise data and complete investigations systematically and logically.
  - **Problem-solving skills :** A forensic accountant may require effective problem-solving skills to contribute to the discovery of illegal financial activities. The ability to pay close attention to detail and examine any irregularities and errors can be critical while handling most fraud cases and recovering lost assets.
  - **Math skills :** Forensic accountants may often determine the meaning of a series of numbers and perform basic calculations to see what is going on with a collection of financial records quickly.

: EXERCISES :

Answer the following in brief :

Environmental Accounting :

1. What do you mean by Environmental Accounting ? What are the basic dimensions of Environmental Accounting ?
2. Short note on Forms of Environmental Accounting.
3. Define Environmental Accounting ? What are the advantages and disadvantages of Environmental Accounting ?
4. State the significance of Environmental Accounting.
5. Explain the need of Environmental Accounting at corporate level.
6. Write in brief about Disclosure of Environmental Accounting Information.
7. Answer in brief about the Environmental reporting practices followed by the companies in India.
8. What are the regulatory framework for corporate environmental reporting ?

Forensic Accounting :

1. What do you mean by Forensic Accounting ? What is the need of Forensic Accounting ?
2. Define Forensic Accounting and state the importance of Forensic Accounting.
3. Explain in detail about the scope of Forensic Accounting.
4. Write a short note on features of Forensic Accounting.
5. Explain about the role played by Forensic accountant while conducting forensic audit.
6. What are the responsibilities of forensic accountant ?
7. Enumerate in detail about the essential skills required by Forensic Accountant.
8. State the application of Forensic Accounting for legal purpose.

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