Unit 1 Introduction to Financial Accounting

Learning Outcome

After reading this unit, you will be able to:

- Explain succinctly financial accounting concepts
- Elucidate on different principles of financial accounting
- Explicate the importance and scope of financial accounting
- Understand Generally Accepted Accounting Principles(GAAP)
- Identify limitations of Financial Accounting

Time Required to Complete the unit

1. 1st Reading: It will need 3 Hrs for reading a unit
2. 2nd Reading with understanding: It will need 4 Hrs for reading and understanding a unit
3. Self Assessment: It will need 3 Hrs for reading and understanding a unit
4. Assignment: It will need 2 Hrs for completing an assignment
5. Revision and Further Reading: It is a continuous process

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1.1 Introduction

Financial accountancy (or **financial accounting**) is the field of accountancy concerned with the preparation of financial statements for decision makers, such as stockholders, suppliers, banks, employees, government agencies, owners and other stakeholders. Financial capital maintenance can be measured in either nominal monetary units or units of constant purchasing power. The central need for financial accounting is to reduce the various principal-agent problems, by measuring and monitoring the agents' performance and thereafter reporting the results to interested users.

Financial accountancy is used to prepare accountancy data for people outside the organisation or for those, who are not involved in the mundane administration of the company. Management accounting, provides accounting information to help managers make decisions to manage and enhance the business.

In short, financial accounting is the process of summarising financial data, which is taken from an organisation's accounting records and publishing it in the form of annual or quarterly reports, for the benefit of people outside the organisation.

Financial accountancy is governed not only by local standards but also by international accounting standard.

1.2 Role of Financial Accounting

- Financial accounting generates some key documents, which includes profit and loss account, patterning the method of business traded for a specific period and the balance sheet that provides a statement, showing mode of trade in business for a specific period.
- It records financial transactions showing both the inflows and outflows of money from sales, wages etc.
- Financial accounting empowers the managers and aids them in managing more efficiently by preparing standard financial information, which includes monthly management report tracing the costs and profits against budgets, sales and investigations of the cost.

Study Notes

Assessment

1. Define "Financial Accounting".
2. Write in short difference between Financial Accounting and Management Accounting.

Discussion

1. Discuss the role of Financial Accounting.

1.3 Principles of Financial Accounting

Financial accounting is based on several principles known as Generally Accepted Accounting Principles (GAAP) (Williamson 2007). These include the business entity principle, the objectivity principle, the cost principle and the going-concern principle.

- **Business entity principle**: Every business requires to be accounted for separately by the proprietor. Personal and business-related dealings should not be mixed.
- **Objectivity principle**: The information contained in financial statements should be treated objectively and not shadowed by personal opinion.
- **Cost principle**: The information contained in financial statements requires it to be based on costs incurred in business transactions.
- **Going-concern principle**: The business will continue operating and will not close but will realise assets and discharge liabilities in the normal course of operations

Study Notes

Assessment

1. Write notes on:

- Objectivity principle.
- Cost principle.

Discussion

1. Discuss the Generally Accepted Accounting Principles (GAAP)

1.4 Importance of Financial Accounting

- It provides legal information to stakeholders such as financial accounts in the form of trading, profit and loss account and balance sheet.
- It shows the mode of investment for shareholders.
- It provides business trade credit for suppliers.
- It notifies the risks of loan in business for banks and lenders.

	Study Notes

	Assessment
1. Explain the need of Financial Accounting.	

	Discussion
1. Discuss the importance of financial information to the parties having interest in business unit.	

1.5 Benefits of Financial Accounting

- **Maintaining systematic records:** It is a primary function of accounting to keep a proper and chronological record of transactions and events, which provides a base for further processing and proof for checking and verification purposes. It embraces writing in the original/subsidiary books of entry, posting to ledger, preparation of trial balance and final accounts.
- **Meeting legal requirements:** Accounting helps to comply with the various legal requirements. It is mandatory for joint stock companies to prepare and present their

accounts in a prescribed form. Various returns such as income tax, sales tax are prepared with the help of the financial accounts.

- **Protecting and safeguarding business assets:** Records serve a dual purpose as evidence in the event of any dispute regarding ownership title of any property or assets of the business. It also helps prevent unwarranted and unjustified use. This function is of paramount importance, for it makes the best use of available resources.
- **Facilitates rational decision-making:** Accounting is the key to success for any decision-making process. Managerial decisions based on facts and figures take the organisation to heights of success. An effective price policy, satisfied wage structure, collective bargaining decisions, competing with rivals, advertisement and sales promotion policy etc all owe it to well set accounting structure. Accounting provides the necessary database on which a range of alternatives can be considered to make managerial decision-making process a rational one.
- **Communicating and reporting:** The individual events and transactions recorded and processed are given a concrete form to convey information to others. This economic information derived from financial statements and various reports is intended to be used by different groups who are directly or indirectly involved or associated with the business enterprise.

	Study Notes

	Assessment
1. State the advantages of financial accounting.	

	Discussion
1. Discuss how financial accounting is beneficial in Decision-Making Process.	

1.6 Limitations of Financial Accounting

One of the major limitations of financial accounting is that it does not take into account the non-monetary facts of the business like the competition in the market, change in the value for money etc.

The following limitations of financial accounting have led to the development of cost accounting:

1. **No clear idea of operating efficiency:** You will agree that, at times, profits may be more or less, not because of efficiency or inefficiency but because of inflation or trade depression. Financial accounting will not give you a clear picture of operating efficiency when prices are rising or decreasing because of inflation or trade depression.

2. **Weakness not spotted out by collective results:** Financial accounting discloses only the net result of the collective activities of a business as a whole. It does not indicate profit or loss of each department, job, process or contract. It does not disclose the exact cause of inefficiency i.e. it does not tell where the weakness is because it discloses the net profit of all the activities of a business as a whole. Say, for instance, it can be compared with a reading on a thermometer. A reading of more than 98.4° or less than 98.4º discloses that something is wrong with the human body but the exact disease is not disclosed. Similarly, loss or less profit disclosed by the profit and loss account is a signal of bad performance of the business in whole, but the exact cause of such performance is not identified.

3. **Not helpful in price fixation:** In financial accounting, costs are not available as an aid in determining prices of the products, services, production order and lines of products.

4. **No classification of expenses and accounts:** In financial accounting, there is no such system by which accounts are classified so as to give relevant data regarding costs by departments, processes, products in the manufacturing divisions, by units of product lines and sales territories, by departments, services and functions in the administrative division. Further expenses are not attributed as to direct and indirect items. They are not assigned to the products at each stage of production to show the controllable and uncontrollable items of overhead costs.

5. **No data for comparison and decision-making:** It will not provide you with useful data for comparison with a previous period. It also does not facilitate taking various financial decisions like introduction of new products, replacement of labour by machines, price in normal or special circumstances, producing a part in the factory or sourcing it from the market, production of a product to be continued or given up, priority accorded to different products and whether investment should be made in new products etc.

6. **No control on cost:** It does not provide for a proper control of materials and supplies, wages, labour and overheads.

7. **No standards to assess the performance:** In financial accounting, there is no such well-developed system of standards, which would enable you to appraise the efficiency of the organisation in using materials, labour and overhead costs. Again, it does not provide you any such information, which would help you to assess the performance of various persons and departments in order that costs do not exceed a reasonable limit for a given quantum of work of the requisite quality.

8. **Provides only historical information:** Financial accounting is mainly historical and tells you about the cost already incurred. As financial data is summarised at the end of the accounting period it does not provide day-to-day cost information for making effective plans for the coming year and the period after that.

9. **No analysis of losses:** It fails to provide complete analysis of losses due to defective material, idle time, idle plant and equipment. In other words, no distinction is made between avoidable and unavoidable wastage.

10. **Inadequate information for reports:** It does not provide adequate information for reports to outside agencies such as banks, government, insurance companies and trade associations.

11. **No answer to certain questions:** Financial accounting will not provide you with answers to such questions as:

a. Should an attempt be made to sell more products or is the factory operating to its optimum capacity?

b. If an order or contract is accepted, is the price obtainable sufficient to show a profit?

c. If the manufacture or sales, of product X were discontinued and efforts made to increase the sale of Y, what would be the effect on the net profit?

d. Why the annual profit is of a disappointing amount despite the fact that output was increased substantially?

e. If a machine is purchased to carry out a job, which at present is done by hand, what effect will this have on the profit line?

f. Wage rates having been increased by 50 paisa per hour, should selling price be increased and if so, by how much?

Study Notes

Assessment

1. State the demerits of financial accounting.

	Discussion

1. State whether statement is True/False:
    a. Financial Accounting does not include non-monetary data.
    b. Financial accounting will give you a correct picture of operating efficiency irrespective of prices are rising or falling because of inflation or trade depression.
    c. Financial Accounting determines total profit and loss for each departments and processes.
    d. Financial Accounting does not determine cost per unit of product and services.
    e. Financial Accounting classifies expenses into direct and indirect.
    f. Financial Accounting provides data related to make or buy decisions.

1.7 Accounting Principles

Financial accounting is information that must be processed and reported objectively. Third parties, who must rely on such information, have a right to be assured that the data is free from bias and inconsistency, whether deliberate or not. For this reason, financial accounting relies on certain standards or guides that are called 'Generally Accepted Accounting Principles' (GAAP).

Principles derived from tradition, such as the concept of matching. In any report of financial statements (audit, compilation, review, etc.), the preparer/auditor must indicate to the reader whether or not the information contained within the statements complies with GAAP.

- **Principle of regularity**: Regularity can be defined as conformity to enforced rules and laws.
- **Principle of consistency**: This principle states that when a business has fixed a specific method for the accounting treatment of an item, it will enter all similar items that follow, in exactly the same way.
- **Principle of sincerity**: According to this principle, the accounting unit should reflect in good faith the reality of the company's financial status.
- **Principle of the permanence of methods**: This principle aims at maintaining the coherence and comparison of the financial information published by the company.

- **Principle of non-compensation**: One should show the full details of the financial information and not seek to compensate a debt with an asset, revenue with an expense etc.
- **Principle of prudence**: This principle aims at showing the reality 'as is': one should not try to make things look rosier than they are. Typically, revenue should be recorded only when it is certain and a provision should be entered for an expense, which is probable.
- **Principle of continuity**: When stating financial information, one assumes that business will not be interrupted. This principle mitigates the principle of prudence: assets do not have to be accounted at their disposable value, but it is accepted that they are at their historical value.
- **Principle of periodicity**: Each accounting entry should be allocated to a given period and split accordingly if it covers several periods. If a client pre-pays a subscription (or lease, etc.), the given revenue should be split to the entire time-span and not accounted for entirely on the date of the transaction.
- **Principle of full disclosure/materiality**: All information and values pertaining to the financial position of a business must be disclosed in the records.

Study Notes

Assessment

1. Write a note on:

   a. Principle of full disclosure/materiality

b. Principle of continuity
c. Principle of periodicity

Discussion

1. Discuss the application of Principles of Accounting in Modern enterprise.

1.8 Accounting Concepts and Conventions

An accounting convention is a modus operandi of universally accepted system of recording and presenting accounting information to the concerned parties. They are followed judiciously and rarely ignored. Accounting conventions are evolved through the regular and consistent practice over the years to aid unvarying recording in the books of accounts. Accounting conventions help in comparing accounting data of different business units or of the same unit for different periods. These have been developed over the years.

1. **Convention of relevance:** The convention of relevance emphasises the fact that only such information should be made available by accounting that is pertinent and helpful for achieving its objectives. The relevance of the items to be recorded depends on its nature and the amount involved. It includes information, which will influence the decision of its client. This is also known as convention of materiality. For example, business is interested in knowing as to what has been the total labour cost. It is neither interested in knowing the amount employees spend nor what they save.
2. **Convention of objectivity:** The convention of objectivity highlights that accounting information should be measured and expressed by the standards which are universally acceptable. For example, unsold stock of goods at the end of the year should be valued at cost price or market price, whichever is less and not at a higher price even if it is likely to be sold at a higher price in the future.
3. **Convention of feasibility:** The convention of feasibility emphasises that the time, labour and cost of analysing accounting information should be comparable to the benefits arising out of it. For example, the cost of 'oiling and greasing' the machinery is so small

that its break-up per unit produced will be meaningless and will amount to wastage of labour and time of the accounting staff.

4. **Convention of consistency:** The convention of consistency means that the same accounting principles should be used for preparing financial statements year on year. An evocative conclusion can be drawn from financial statements of the same enterprise when there is similarity between them over a period of time. However, these are possible only when accounting policies and practices followed by the enterprise are uniform and consistent over a period. If dissimilar accounting procedures and practices are followed for preparing financial statements of different accounting years, then the result will not be analogous. Generally, a businessman follows the above-mentioned general practices or methods year after year. For example, while charging depreciation on fixed assets or valuing unsold stock, if a particular method is used it should be followed year after year, so that the financial statements can be analysed and a comparison made.
5. **Convention of full disclosure:** Convention of full disclosure states that all material and relevant facts concerning financial statements should be fully disclosed. Full disclosure means that there should be complete, reasonable and sufficient disclosure of accounting information. Full refers to complete and detailed presentation of information. Thus, the convention of full disclosure suggests that every financial statement should disclose all pertinent information. For example, the business provides financial information to all interested parties like investors, lenders, creditors, shareholders etc. The shareholder would like to know the profitability of the firm while the creditors would like to know the solvency of the business. This is only possible if the financial statement discloses all relevant information in a complete, fair and an unprejudiced manner.
6. **Convention of conservatism:** This concept accentuates that profits should never be overstated or anticipated. However, if the business anticipates any loss in the near future, provision should be made for it in the books of accounts, for the same. For example, creating provision for doubtful debts, discount on debtors, writing off intangible assets like goodwill, patent and so on should be taken in to consideration Traditionally, accounting follows the rule 'anticipate no profit and provide for all possible losses.' For example, the closing stock is valued at cost price or market price, whichever is lower. The effect of the above is that in case market price has come down then provide for the 'anticipated loss', but if the market price has increased then ignore the

'anticipated profits'. The convention of conservatism is a valuable tool in situation of ambiguity and qualms.

Study Notes

Assessment

1. Write short notes on:

    a. Convention of conservatism
    b. Convention of full disclosure
    c. Convention of feasibility
    d. Convention of objectivity

Discussion

1. Discuss the following:

"Accounting convention is a modus operandi of universally accepted system of recording and presenting accounting information"

1.9 Accounting Standards in India and International Accounting Standards

Accounting standards are being established both at national and international levels. However, the diversity of accounting standards among the nations of the world has been a problem for the globalisation of the business environment. In India, the Accounting Standards Board (ASB) was constituted by the Institute of Chartered Accountants of India (ICAI) on 21st April 1977, which performs the function of formulating accounting standards. The Statements on accounting standards are issued by the Institute of Chartered Accountants of India (ICAI) to establish standards that have to be complied with, to ensure that financial statements are prepared in accordance with a commonly accepted accounting standard in India (India GAAP).

Accurate and reliable financial information is the lifeline of commerce and investing. Presently, there are two sets of accounting standards that are accepted for international use namely, the **U.S**., Generally Accepted Accounting Principles (**GAAP**) and the International Financial Reporting Standards **(IFRS)** issued by the London-based International Accounting Standards Board (**IASB**).

Generally, accepted accounting principles (GAAP) are diverse in nature but based on a few basic principles as advocated by all GAAP rules. These principles include consistency, relevance, reliability and comparability. Generally Accepted Accounting Principles (GAAP) ensures that all companies are on a level playing field and that the information they present is consistent, relevant, reliable and comparable. Although U.S. GAAP is only applicable in the U.S., other countries have their own adaptations that are similar in purpose, although not always in design.

IFRS are International Financial Reporting Standards, which are issued by the International Accounting Standards Board (IASB), a committee compromising of 14 members, from nine different countries, which work together to develop global accounting standards. The aim of this committee is to build universal standards that are translucent, enforceable, logical, and of high quality. Nearly 100 countries make use of IFRS. These countries include the European Union, Australia and South Africa. While some countries require all companies to stick to IFRS, others merely try to synchronize their own country's standards to be similar.

India is yet to implement IFRS. It was reported in the Financial Express, New Delhi on March 26 that India will adopt the globally accepted International Financial Reporting Standards (IFRS) by 2011, a move that will integrate the accounting system with the rest of the world. According to the Institute of Chartered Accountants of India (ICAI) President Ved Jain, “A common accounting standard is in the interest of the investors who are exploring investment opportunities in other geographical areas as well".

Thus, this move by India will harmonise its accounting standards with the internationally accepted accounting standards, which will lead to a globally accepted accounting system for the companies in India.

Study Notes

Assessment

1. Write notes on the following:

   a. International Accounting Standards Board
   b. International Financial Reporting Standards
   c. Generally Accepted Accounting Principles

Discussion

1. Discuss Accounting Standards in India and Compare it with International Accounting Standards. State the suggestions for the same.

1.10 Summary

Financial accountancy (or **financial accounting**) is the field of accountancy concerned with the preparation of financial statements for decision makers, such as stockholders, suppliers, banks, employees, government agencies, owners and other stakeholders. Financial capital maintenance can be measured in either nominal monetary units or units of constant purchasing power. The fundamental need for financial accounting is to reduce principal-agent problem by measuring and monitoring agents' performance and reporting the outcome to interested end-users.

PRINCIPLES OF FINANCIAL ACCOUNTING

Financial accounting is based on several principles. These are called as Generally Accepted Accounting Principles (GAAP) (Williamson 2007). These include the business entity principle, the objectivity principle, the cost principle and the going-concern principle.

- **Business entity principle**: Every business requires to be accounted for independently by the proprietor. Personal and business-related dealings should not be varied.
- **Objectivity principle**: The information contained in financial statements should be objective and not based on opinions.
- **Cost principle**: The information contained in financial statements requires to be based on costs incurred in business transactions.
- The **Going-concern principle**: The business will continue operating and will not close but will realise assets and discharge liabilities in the normal course of operations Principles derived from tradition, such as the concept of matching. In any report of financial statements (audit, compilation, review, etc.), the preparer/auditor must indicate to the reader whether or not the information contained within the statements complies with GAAP.
- **Principle of regularity**: Regularity can be defined as conformity to enforced rules and laws.

- **Principle of consistency**: This principle states that when a business has fixed a method for the accounting treatment of an item, it will enter all similar items that follow it in precisely the same way.
- **Principle of sincerity**: According to this principle, the accounting unit should reflect in good faith the reality of the company's financial status.
- **Principle of the permanence of methods**: This principle aims at maintaining the coherence and comparison of the financial information published by the company.
- **Principle of non-compensation**: One should show the full details of the financial transactions and not seek to compensate a debt with an asset, a revenue with an expense, etc. (see convention of conservatism)
- **Principle of prudence**: This principle aims at showing the reality 'as it is': one should not try to make things look rosier than they are. Typically, revenue should be recorded only when it is certain and a provision should be entered for an expense, which is probable.
- **Principle of continuity**: When stating financial information, one should assume that the business would not be interrupted. This principle mitigates the principle of prudence: assets do not have to be accounted at their disposable value, but it is accepted that they are at their historical value (see depreciation and going concern).
- **Principle of periodicity**: Each accounting entry should be allocated to a given period and split accordingly especially if it covers several periods. If a client pre-pays a subscription (or lease, etc.), the given revenue should be split to the entire time-span and not accounted for entirely on the date of the transaction.
- **Principle of full disclosure/materiality**: All information and values pertaining to the financial position of a business must be disclosed in the records.
- **Principle of utmost good faith**: All the information regarding the firm should be disclosed to the insurer before the insurance policy is taken.

ACCOUNTING CONVENTIONS

An accounting convention is the modus operandi of universally accepted system of recording and presenting accounting information to the interested parties. The various accounting conventions are convention of relevance, convention of objectivity**,** convention of feasibility, convention of consistency convention of consistency and convention of conservatism.

ACCOUNTING STANDARDS IN INDIA AND INTERNATIONAL ACCOUNTING STANDARDS

In India, the Accounting Standards Board (ASB) was constituted by the Institute of Chartered Accountants of India (ICAI) on 21st April 1977, which performs the functions of formulating accounting standards. Accurate and reliable financial information is the lifeline of commerce and investing. Presently, there are two sets of accounting standards accepted for international use namely, the U.S., Generally Accepted Accounting Principles (GAAP) and the International Financial Reporting Standards (IFRS). India is yet to implement IFRS and is in the process of adopting the globally accepted International Financial Reporting Standards (IFRS) by 2011.

1.11 Self Assessment Test

Broad Questions

1. What do you understand by financial accounting?
2. Explain the benefits of Financial Accounting
3. Explain the Accounting Standards in India and International Accounting Standards.

Short Notes

a. Financial accounting
b. Limitations Of financial accounting
c. Basic Principles of accounting
d. Accounting conventions
e. Role of Financial Accounting

1.12 Further Reading

1. Modern Accountancy, Hanif & Mukherjee, Law Point, 2006
2. Financial Accounting, S. Kr. Paul, New central book agency (P) LTD, 2003
3. Fundamentals of Accounting, S. K. Paul, New central book agency (P) LTD, 2003
4. Advanced Accountancy, Hrishikesh Chakrabotry, Oxford University Press, 2002
5. Accountancy, Shukla & Grewal, S Chand & Company Ltd, 1997

Assignment

Explain in detail the overview of financial accounting.

Unit 2 Final Accounts

Learning Outcome

After reading this unit, you will be able to:

- Identify the Stages of the Accounting Cycle
- Narrate the Objectives of Preparing Final Accounts
- Understand Various Statements / Accounts which comprise Final Accounts of Business Entity
- Define the Treatment of Different Items in Preparation of the Final Accounts
- Pass Appropriate Adjustment Entries
- Prepare Trading, Profit & Loss Account and Balance Sheet
- Explain the Concept of Financial Statements
- Differentiate between Various Types of Financial Statements
- Describe the Nature and Limitations of Financial Statements
- List the Basic Requirements and the Formats of Income Statement and Balance Sheet of a Company

Time Required to Complete the unit

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Content Map

2.1 Introduction

The prime objective of accounting is to ascertain how much profit or loss a business organisation has made during any accounting period and to determine its financial position on a given date. Preparing final accounts or financial statements serve this purpose. After the preparation of Trial Balance, the next level of work in accounting is called "Final Accounts" level. Preparation of Final Accounts involves the following:

- Preparation of a Trading Account
- Preparation of a Profit & Loss Account and
- Preparation of a Balance Sheet

Trial balance provides the essential input for the preparation of these accounts or statements. These accounts / statements provide necessary information to various interested groups viz. shareholders, investors, creditors, employees, management and government agencies etc. Therefore, these financial statements are prepared to serve the information needs of these diverse groups to enable them to make appropriate decisions.

2.2 Trading Account

Trading Account is prepared to know the outcome of a trading operation. Trading Account is made with the chief intention of calculating the gross profit or gross loss of a business establishment during an accounting period, which is generally a year. In accounting phraseology, gross profit means overall profit. Gross profit is the difference between sale proceeds of a particular period and the cost of the goods actually sold. Since gross profit means overall profit, no deduction of any sort, i.e. general, administrative or selling and distribution expenses is made. Gross Profit is said to be made when the sale proceeds exceed the cost of goods sold. On the contrary, if the cost price of the goods is more than the selling price, then we can say that there is a loss.

2.2.1 FORMAT OF A TRADING ACCOUNT

In order to illustrate how the gross profit is ascertained, knowledge of format of the Trading Account is very important. This gives a clear presentation of how the gross profit is calculated. A Trading Account is prepared in "T" form just like every other account is prepared. Though it is an account, it is not just an ordinary ledger account. It is one of the two accounts which are prepared only once in an accounting period to ascertain the profit or loss of the business. Because this account is made only once in a year, no date or journal folio column is provided.

The format of a Trading Account with the usually appearing entries therein is shown below:

Table 2.1: Trading Account

Trading Account of …… for the year ended…

Dr. Cr.

Particulars	Amount (Rs.)	Amount (Rs.)	Particulars	Amount (Rs.)	Amount (Rs.)
To Opening Stock		***	By Sales	***	
To Purchase	***		Less: Returns Inwards	***	***
Less: Returns Outwards	***	***	By Abnormal	***	
To Direct Expenses	***		Losses	***	
Freight & Carriage	***		Loss by fire	***	***
Customs & Insurance	***		Loss by Accident		***
	***				
Wages	***		Loss by theft		
Packing	***		By Closing Stock		
(essential)	***	***			
Gas & Water		***	By Gross Loss c/d		
Fuel & power					
Factory expenses			(Balancing figure)		
Royalty on production					
Dock Dues					
To Gross Profit c/d					
(Balancing figure					
		***			***

2.2.2 TRADING ACCOUNT ITEMS (DR. SIDE)

1. **Opening Stock**: It refers to the value of goods at hand at the end of the previous accounting year. Opening stock means the stock of an item at the beginning of a new inventory-keeping period. It becomes the opening stock for the current accounting year and contains the value of goods in which the business deals.

2. **Purchases**: It refers to the value of goods (in which the concern deals) which are purchased either on cash or on credit for the purpose of resale. The balance of the purchase account, appearing in the Trial Balance, reflects the total purchases made during the accounting period. While dealing with purchases, we must bear in mind the following aspects:

   a. Purchase of capital asset should not be added with the purchases. If it is already included in purchases, it should be deducted immediately.
   b. If goods are purchased for personal consumption and they are added with the purchases, they should be excluded. These types of purchases should be treated as drawings.
   c. If some of the goods purchased are still in transit at the year-end, it is better to debit Stock-in-transit Account and credit Cash or Supplier's Account.
   d. If the amounts of purchases include goods received on consignment, on approval or on hire purchase, these should be excluded from purchases.
   e. Cost of goods sent on consignment must be deducted from the purchases in case of a trading concern.

3. **Purchases Returns/Returns Outwards**: It may come about that due to some reason, the goods are sent back to the supplier. In that case, the supplier is debited in the book of accounts and purchases returns or returns outwards is credited. It appears on the credit side in the Trial Balance. There are two ways of showing the purchases returns in the Trading Account. It may be shown by way of deduction from purchases in the Trading Account. An alternative way is to show the purchases returns in the credit side of the Trading Account.

4. **Direct Expenses**: These types of expenses are incurred in connection with purchase, procurement or production of goods. These expenses are directly related to the process of production. It also includes expenses that bring the goods up to the point of sale as shown in Trading Format above.

2.2.3 TRADING ACCOUNT ITEMS (CR. SIDE)

1. **Sales**: It refers to the sale of goods in which the business deals and includes both cash and credit sales. It does not include sale of old, obsolete or depreciated assets, which were acquired for utilisation in business. However, goods sent to customers on approval basis, free samples and sales tax, if any, included in the sales figure should be excluded.

2. **Sales Returns / Returns Inward**: When goods are returned by the buyers for some reason, it is called Sales Return or Returns Inward. In the books of account, "Returns Inwards Account" or "Sales Returns Account" is debited and buyer's account is credited. It appears on the debit side of Trial Balance. We can show the sales returns in the Trading Account in two ways. It may be shown by way of deduction from sales in the Trading Account. An alternative way to show the sales returns is in the debit side of the Trading Account.

3. **Abnormal Loss**: It refers to the abnormal loss of stock due to fire, theft or accident. If any abnormal loss is there, it is credited fully to the Trading Account because the Trading Account is prepared under normal conditions of the business and has no place for abnormal instances.

4. **Closing Stock**: It refers to the value of goods lying unsold at the end of any accounting year. This stock at the end is called closing stock and is valued at either cost or market price, whichever is lower. The trial balance generally does not include closing stock. Therefore, the following entry is recorded to incorporate the effect of closing stock in the Trading Account.

    Closing Stock A/c Dr.

    To Trading A/c

However, if closing stock forms a part of Trial Balance, it will not be transferred to Trading Account but taken only to the Balance Sheet. In case of the goods that have been dispatched to customers on approval basis, such goods should be included in the value of closing stock.

2.2.4 BALANCING OF TRADING ACCOUNT

After recording the above items in the respective sides of the Trading Account, the balance is calculated to ascertain Gross Profit or Gross Loss. If the total of credit side is more than that of the debit side, the excess represents Gross Profit. Conversely, if the total of debit side is more than that of the credit side, the excess represents Gross Loss. Gross Profit is transferred to the credit side of the Profit & Loss Account and Gross Loss is transferred to the debit side of the Profit & Loss Account.

Study Notes

Assessment

1. Explain the format of Trading account in brief.
2. Explain the following:
   a. Return outwards
   b. Opening stock
   c. Purchases
   d. Abnormal Loss
   e. Sales
   f. Return inwards

Discussion

1. Discuss the features of Trading Account and its role in preparation of final accounts
2. Prepare Trading account of any manufacturing concern of your choice.
3. Discuss the concept of closing stock and its valuation process.
4. Discuss the direct expenses included on the debit side of Trading account in detail.
5. Discuss the process of tallying Trading account.

2.3 Profit & Loss Account

After preparing Trading Account, the subsequent step is to prepare Profit & Loss Account with a view to ascertain net profit or net loss during an accounting period. The Profit & Loss Account can be defined as a report that summarises the revenues and expenses of an accounting period to reflect the alterations in various critical areas of the firm's operations. It indicates how the revenue (money received from the sale of products and services before expenses are withdrawn) is transformed into the net income (the result after all revenues and expenses have been accounted for). It displays the revenues recognised for a specific period and the cost and expenses charged against these revenues, including write-offs (e.g. depreciation and amortisation of various assets) and taxes. The objective of the income statement is to explain to the managers and investors whether the company made or lost money during the period being reported. As pointed out earlier, the balance of the Trading Account (gross profit or gross loss) is transferred to the Profit & Loss Account, which becomes the starting point of the preparation of Profit & Loss Account. It takes into consideration all remaining indirect (normal and abnormal) expenses and losses related to or incidental to business. These operating and non-operating expenses are charged to Profit & Loss Account and shown to the debit side of the account. After transferring the Gross Profit or Gross Loss from the Trading Account to the Profit & Loss Account, the sources of other incomes like commission or discount received are shown on the credit side of the Profit & Loss Account. The credit side also includes the non-trading income like interest on bank deposits or securities, dividend on shares, rent of property let-out, profit generated out of the sale of fixed assets, etc. On the debit side will appear all other expenses that appear in the Trial Balance but cannot find a place in the Trading Account. The debit side will also include the losses arising out of sale of assets and any abnormal losses.

The Profit & Loss Account measures net income by matching revenues and expenses according to the accounting. Net income is the difference between total revenues and total expenses.

2.3.1 FORMAT OF A PROFIT & LOSS ACCOUNT

Table 2.2: Profit & Loss Account

Profit & Loss Account for the year ended…

Dr. Cr.

	Particulars	Amount (Rs.)		Particulars	Amount (Rs.)
	Gross Loss b/d	**	By	Gross Profit b/d	**
	Office and Administrative Expenses	**	By	Interest received	**
	Salaries for Office Staff	**	By	Dividend Received	**
	Office Rent, Rates and Taxes	**	By	Rent Received	**
	Printing and Stationery		By	Discount Received	**
	Books and Periodicals Postage and Telephones	** ** **	By	Profit on sale of fixed assets	**
	Insurance Premium for office	**	By	Profit on sale of investments	**
	Audit Fees	**	By	Dividend from shares Insurance Claims	**
	Repairs & Maintenance	**	By	Duty Drawbacks	**
	Audit Fees	**	By	Apprenticeship	**
	Legal Expenses		By	Premium	**

	Particulars	Amount (Rs.)		Particulars	Amount (Rs.)
	Office Lighting		By	Miscellaneous Receipts Bad Debt recovered	**
	Depreciation of Office Assets	**			
	Other office expenses	**			
	Selling and Distribution Expenses:	**			
	Salesmen's Salaries	**			
	Selling Commission	**			
	Traveling Expenses	**			
	Brokerage	**			
	Trade Expenses	**			
	Advertisement & Publicity	**			
	Sales Promotion Expenses	**			
	Carriage Outward	**			
	Godown rent	**			
	Bad debts	**			
	Provision for Bad Debts	**			
	Repairs of Vehicles	**			

	Particulars	Amount (Rs.)		Particulars	Amount (Rs.)
	Godown Insurance	**			
	Delivery Van Expenses	**			
	Packing Expenses	**			
	Rebate to Customer				
	Royalty (based on units sold)	**			
	Financial Expenses	**			
	Discount Allowed				
	Interest on Loan paid				
	Interest on Capital				
	Discount on Bills				
	Bank Charges				
	Abnormal Losses				
	Loss on Sale of machinery				
	Loss on sale of Investment				
	Loss by fire				
To	Misc. Expenses	**			
To	Net Profit transferred to Capital A/c	**	By	Net Loss transferred to Capital A/c	

	Particulars	Amount (Rs.)		Particulars	Amount (Rs.)
	(Balancing figure)			(Balancing figure)	
		**			**

2.3.2 Profit & Loss Account Items (Dr. Side)

The items that appear in the debit side of a Profit & Loss Account can be broadly classified as under:

- **Management Expenses:** These are the expenses incurred for carrying out the day-to-day administration of a business. Expenses under this head include office salaries, office rent and lighting, printing and stationery and telegrams, telephone charges etc.
- **Selling and Distribution Expenses:** These expenses are incurred for selling and distribution of products and services, as the name indicates. They comprise of commissions and salaries of salesmen, advertising expenses, packaging, bad debts etc.
- **Maintenance Expenses:** These expenses are incurred for maintaining the fixed assets of the administrative office in a good condition. They include expenses towards repairs and renewals.
- **Financial Expenses:** These expenses are incurred for arranging finances necessary for running the business. These include interest on loans, discount on bills, brokerage and legal expenses for raising loans etc.
- **Abnormal Losses:** Some abnormal losses may arise during the accounting period. All types of abnormal losses are treated as unusual expenses and debited to Profit & Loss Account. Examples are stock lost by fire but not covered by insurance, loss on sale of machinery, cash defalcation etc.

Wages and salaries earned by the worker- whether paid or otherwise- and rent, electricity, telephone expenses are to be taken into consideration whether paid during the accounting period or later. To ascertain the amount of expenses to be debited to the Profit & Loss Account, four types of events are essentially considered and then cash payment is made in connection with these events. They are as under:

- **Expenses incurred and paid out in that year:** If some particular expenditure is incurred in a year and paid in the same year, the same will be debited to the Profit & Loss Account.

- **Expenses incurred but not paid out, partly or fully, during the current year:** There are some expenses, which are incurred in the current accounting period, but not paid for, partly or fully, by the end of the period; they are called "Outstanding Expenses". These expenses become liabilities of the business at the end of the accounting year. In fact, on the date of the final accounts, outstanding expenses- in the form of both the expenses and a liability- exist without having been recorded in the books of account. For recording it, the following entry is to be passed:

Expenses A/c Dr. (will be shown in the P & L A/c)

To Outstanding Expenses A /c (will appear in the liabilities side of Balance Sheet)

- **Expenses paid for during the current year, but not incurred as yet, partly or fully:** Sometimes, it may happen that some expenses are paid during the current year, but are not incurred as yet, partly or fully. Those expenses are known as "Prepaid Expenses". Prepaid expense is an asset to the business and will be shown in the Balance Sheet. The adjustment entry to be passed:

Prepaid Expenses A/c Dr. (to be shown as asset in the Balance Sheet)

To Expenses A/c (balance of this account to be debited to P&L A/c)

- **Expenses of the current year, likely to arise in subsequent period:** Sometimes, an expenses or a loss may arise in the future in connection with current years' business. In such a case, we make a provision for the anticipated loss and a charge is created against the profit for the current period. This provision is shown as either a liability or a contingent asset, i.e. it appears in the Balance Sheet as a deduction from some other asset. The best example of this anticipated expense is Provision for bad debts.

2.3.3 PROFIT & LOSS ACCOUNT ITEMS (CR. SIDE)

The Items that will appear in the credit side of a Profit & Loss Account can be broadly classified as under:

- **Gross Profit:** This is the balance of the Trading Account transferred to the Profit & Loss Account. If the Trading Account shows a gross loss, it will appear on the debit side.
- **Other Incomes:** Sometimes a business might generate some profit, which is not due to the sale of its goods or services, because the business may have some other source of financial income. The examples are discount or commission received.
- **Non-trading Income:** The business may have various transactions with the bank. At the end of the year, the business may earn some amount of interest, which will find a place

in the Profit & Loss Account as non-trading income. The business may have some investment outside the business in the form of shares, debentures or units. All sorts of gains obtained from such kinds of investments are considered as non-trading income and are treated accordingly.

- **Abnormal Gains:** There may be capital gains arising during the course of the year, e.g. profit arising out of sale of a fixed asset. The profit is shown as a separate income on the credit side of the Profit & Loss Account. We must remember that all incomes from the abnormal gains or other income should be credited to the Profit & Loss Account if they arise or accrue during the period. Similarly, income received in advance should be deducted from the income.

2.3.4 Balancing the Profit & Loss Accounts

Once the respective accounts are transferred from trial balance to P&L account, gross profit/loss transferred from trading account and all adjustments are take care of, the next step in preparation of P&L is the balancing of the account. This replicates balancing of trading account. The totals of debit side and credit side are computed and the difference between these totals is either a net profit or net loss. If the total of debit side exceeds the total of credit side, there is a net loss, whereas when the total of credit side exceeds the total of debit side, there is a net profit. Net Profit is the last item to be recorded on debit side; else, net loss is the last item on credit side. After computing net profit/loss, the totals of two sides of P&L match.

The balance in the Profit and Loss Account represents the net profit or net loss. If the credit side is more than the debit side, it shows the net profit. Alternatively, if the debit side is more than the credit side, it shows net loss. When the Profit and Loss Account shows a net profit, we pass the following entry:

Profit & Loss A/c Dr.

To Net Profit A/c

If the Profit and Loss Account shows a net loss, the entry will be reversed.

2.3.5 Adjustments

1. Bad Debts

In order to display high amount of sales figures, goods are frequently sold out to known customers on credit. Some of these customers fail to pay their debts due to insolvency. These debts, which cannot be recovered, are called Bad Debts. It is a loss to the business and an adjustment is needed. The required entry will be:

Bad Debts A/c Dr

To sundry debtors A/c

and then

Profit & Loss Account Dr.

To Bad Debts A/c

It should be noted here that no adjustment is required for any bad debt that already appears in the Trial Balance. Bad debt appearing in the Trial Balance should be debited only to Profit & Loss Account of the Period.

2. Provision for Bad Debts

Credit sales are recognised as income at the time of the sale without knowing the exact time of collection. In the course of time, loss may result from unsuccessful attempts to collect the dues from the customers. Every organisation creates a provision for this anticipated loss, from the reported income of the credit sales in the current period.

There are different methods of creating provision for bad debts. However, we will discuss only one method here. Accounting entry will depend upon the situation as to whether provision for bad debts is or is not appearing in the Trial Balance.

Situation 1: When provision for Bad Debts not appearing in the Trial Balance:

The accounting entry will be:

Profit & Loss Account Dr.

To Provision for Bad Debts Account

(To be shown in the Balance Sheet as a deduction for Debtors)

Situation 2: When provision for Bad Debts appearing in the Trial Balance:

At first, calculate the amount of provision to be created at the end of the period in the same way as above. Now compare the provision with the provision appearing in the Trial Balance. There are two resultant options:

a. If the new provision exceeds the provision appearing in the Trial Balance, pass the following entry:

Profit & Loss Account Dr.

To provision for Bad Debts

b. If the new provision is less than the provision appearing in the Trial Balance, pass the following entry:

Provision for Bad Debts Dr.

To Profit & Loss Account

Here, it should be noted that only new provision should be shown in the Balance Sheet as a deduction from Sundry Debtors.

Example

Pass necessary entries from the following information:

Dr. Trial Balance Cr.

Particulars	**Rs**	**Particulars**	**Rs**
Sundry Debtors	40,660	Provision for Bad Debts	1,500

Additional information: (i) Bad debt Rs 600 after preparation of Trial Balance (ii) Create provision for bad debts @ 5 % on Sundry Debtors.

Journal

Dr. Cr.

Date	**Particulars**	**Rs.**	**Rs.**
	Bad Debts A/c Dr.	600	
	To sundry debtors A/c		600
	(Being bad debt written off)		
	Profit & Loss A/c Dr.	500	
	To provision for bad Debts A/c		500
	(Being the creation of additional provision)		
	Profit and Loss A/c Dr.	600	
	To Bad Debts A/c		600

Balance Sheet			
Liabilities	**Rs.**	**Assets**	**Rs.**
		Sundry Debtors Less: Bad Debts Less: P.B.D.	40,600 - 600 40,000 - 2,000 38,000

Dr.	Profit & Loss Account		Cr.
Particulars	**Rs.**	**Particulars**	**Rs.**
To Prov. For bad debt New 2,000 Less: Old -1,500 To Bad Debt	 500 600		

Note: New provision to be created: Sundry Debtors Rs. 40,600 Less: Bad debts Rs: 600= Rs. 40,000.

New provision required @ 5 % on Rs. 40,000 = Rs. 2,000 less: Provision already in Trial Balance Rs. 1,500 (additional)

3. Provision for Discount on Debtors

Many business organisations offer to give a cash discount to all those debtors who arrange to make their payment on or before the due date. It is clear that the real worth of debtors will be the gross figure of debtors minus the cash discount that they would be given. The figure of debtors should be accordingly adjusted.

The difficulty, however, is that nobody knows how many debtors will entertain cash discount and what the amount will be. Therefore, all that is possible is to make a rough estimate. Usually, it is made at a percentage of outstanding debtors who actually repay their obligation. Therefore, the estimate amount of bad debt should be deducted from the total of debtors and provision for discount on debtors should be made only on the balance.

Profit & Loss Account Dr.

To Provision for discount on Debtors Account (To be shown in the Balance Sheet by way of deduction from Sundry debtors)

Example:

- Total Sundry Debtors as per Trial Balance Rs. 40,600
- Bad Debt after Trial Balance Rs. 600
- Provision for debt to be created @ 5% on Sundry Debtors
- Provision for Discount on Sundry Debtors to be created @ 2%

Calculate the amount of Provision for Discount on Sundry Debtors.

Debtors as per Trial Balance	Rs. 40,600
Less: Bad debt written off	Rs. 600
	40,000
Less: Provision for bad debt @ 5%	Rs. 2,000
	38,000

Provision for discount on Sundry Debtors will be: 2/100 x Rs. 38,000= Rs. 760.

4. Reserve for discount on Creditors

If goods are purchased on credit and cash is paid to creditors in time, creditors allow cash discount. It is considered to be the income of the business. For this, following entries are passed:

(i) Creditors Account Dr.

To bank Account

To Discount Account

(ii) Discount Received Account Dr.

To Profit & Loss Account

At the end of the accounting year, we may expect certain discount out of such creditors. However, that discount will be received in the next year though it is actually related to the current period. An adjustment is requested for the expected discount from creditors that should be reflected in the accounts at the year-end as follows:

Step 1

Calculate probable amount of discount to be received from creditors. Generally, it is calculated by applying a percentage on outstanding creditors.

Step 2

Pass the following entry to record it:

Reserve for Discount on Creditors Account Dr.

To Profit & Loss Account

Step 3

Show this reserve for Discount on Creditors in the Balance Sheet by way of deduction from creditors.

In the next year, when the actual discount is received, the following entry is to be passed:

(i) Creditors Account Dr.

To Bank/ Cash Account

To Discount Received Account

(ii) Discount Received Account Dr.

To Reserve for Discount on Creditors Account

Reserve for Discount on Creditors Account is bound to leave a balance. This should be adjusted while creating similar reserve on creditors outstanding on the last date of the accounting year in question.

Note: In actual practice, no organisation makes any reserve for discount on creditors due to the principle of conservatism.

5. Depreciation

According to Pickles, “Depreciation is the permanent and continuing diminution in the quality, quantity or value of an asset". It is a measure of wearing out, consumption or other loss of values of a depreciable asset arising from use and passage of time. It is generally charged to such assets as Plant & Machinery, Building, Furniture, Equipment, etc. Initially, the cost of the assets including installation cost is debited to the particular assets. In each accounting period, a portion of the cost expires and it needs adjustment for showing correct profit of the period and correct value of the assets. Adjustment entries are:

(a) When assets account is maintained at written down value:

(i) Depreciation Account Dr.

To Assets Account

(Being depreciation charged)

(ii) Profit & Loss Account Dr.

To Depreciation Account

(Being depreciation transferred to profit & Loss Account)

(b) When assets account is maintained at cost price:

(i) Depreciation Account Dr.

To Provision for Depreciation Account

(Being depreciation Charged)

(ii) Profit & Loss Account Dr.

To Depreciation Account

(Being depreciation transferred to profit & Loss Account)

Total accumulated depreciation is shown in the Balance Sheet liabilities side. Alternatively, it can be shown by way of deduction from the original cost of assets side. Here, it should be noted that no adjustment is required for depreciation that already appears in the Trial Balance. Depreciation that already appears in the Trial Balance should only be debited to Profit & Loss Account.

6. Goods Distributed as Free samples:

This is one kind of advertisement. When goods are distributed to the prospective customers as free samples, an expense is incurred (known as advertisement expense) and there is a usual reduction from the stock of goods. The following entry is passed:

Advertisement Account Dr.

To Purchase Account (For a trader)

Or

To Trading Account (For a manufacturer)

At the year-end, transferring the entry to the Profit & Loss Account closes the Advertisement Account:

Profit & Loss Account Dr.

To Advertisement Account

7. Income Tax

Income tax is not an expense to earn revenue. Therefore, when the profit is calculated, we cannot deduct income tax from the profit and treat it as an expenditure of the business. For a sole proprietor, income tax is payable by the owner and not by the business. Therefore, if income tax appears in the Trial Balance, it should be treated as drawing and should be deducted from the capital. Following are the entries to be passed:

(a) Income Tax Account Dr. (When Paid)

To Cash/ Bank Account

(b) Drawing Account Dr.

To Income Tax Account

However, for a registered partnership firm, income tax is payable by the business itself and not by the owners. It generally appears as an appropriation of the net profits. The following entry is passed:

Profit and Loss Appropriation Account Dr.

To Income Tax Account

8. Drawing Made by the Proprietors

Drawing made by the proprietor(s) may be in cash or in kind. Drawing relates to the resources of the business and the capital of the owner(s).

Drawings made in Cash: In this case, following entries are passed:

(a) Drawings Account Dr.

To Cash/Bank Account

(b) Capital Account Dr.

To Drawings Account

Drawings made in kind: When some of the stocks are withdrawn from the business, the following entries are passed:

(a) Drawings Account Dr.

To Purchases Account

(b) Capital Account Dr.

To Drawings Account

If the drawings made by the owner are incorporated in sales, we are to pass a reverse entry to cancel the original entry. For the drawings, the above two entries are to be passed:

9. Mutual Indebtedness

Sometimes, a debtor may also be a creditor for the business. If finished goods are sold to X for Rs. 100 and raw material is purchased from him for Rs. 500`, the name of X will appear both in the debtors and creditors list. Generally, we set off these types of accounts. We transfer the account that has a smaller balance to the account having a bigger balance and, in effect, one account is closed. The following entry is passed (the amount will be the smaller of the two figures):

Sundry Creditors Account Dr.Rs.500

To Sundry Debtors Account Rs. 500

10. Debtors arising out of Dishonour of Cheques or Bills

When a cheque previously received from a debtor is dishonoured, the old position of debtor and creditor is restored between the buyer and the seller respectively. In this case, the Debtor Account is debited and Bank Account is credited. In effect, the value of the sundry debtors increases and bank balance decreases.

When a bill previously received from a debtor is dishonoured, the old position of debtor and creditor is restored between the buyer and the seller respectively. In this case, the Debtor Account is debited and Bank Account is credited. In effect, the value of the sundry debtors increases and one of the following is credited, depending on the manner in which it has been previously dealt with:

Sundry Debtors Account Dr. (Dishonour of Bill)

To Bills Receivable Account (When the bill is retained)

To Bills for Collection Account (When the bill is sent to bank for collection)

To Bank Account (When the bill is discounted with banker)

To Endorsee Account (When the bill is endorsed)

If a provision for doubtful debts is to be created, it will be on the value of the sundry debtors after making the above Adjustments.

11. Abnormal Loss of Stock by Accident e.g., by Fire

If a portion of the stock is lost, the value of such loss is first to be ascertained. Therefore, Abnormal Loss Account is to be debited and Trading Account is to be credited. Transferring balance to the Profit & Loss Account closes abnormal loss account. Profit & Loss Account is to be debited and abnormal loss account is to be credited. If the above loss is insured against risk, Insurance Claim Account (or Insurance Company Account) is to be debited and Abnormal Loss Account is to be credited. Until the money is received, Insurance Claim (or Insurance Company Account) will find a place in the asset side of the Balance Sheet. When the money is received, Bank Account is debited and the Insurance Claim Account (Insurance Company Account) is credited. If the goods are partially insured, the portion not covered by insurance is to be charged to Profit & Loss Account.

Journal entry to be passed is as follows:

(i) Accidental Loss Account Dr. (Actual loss of stock)

To Trading Account

(ii) (a) Insurance Claim Account Dr. (Insurance claim admitted by the insurance Co)

Or

(b) Insurance Company Account Dr. (Insurance claim admitted by the insurance Co)

Profit & Loss Account Dr. (Claim not admitted)

To Accidental Loss Account

12. Commission to the manager

Sometimes, the manager of a concern is given a percentage of the profit as commission. Since it is an expense like salaries, we must account for it. The entry will be:

Profit & Loss Account Dr.

To Commission Account

If the amount is not paid within the accounting period, it will be shown in the liability side of the Balance Sheet as commission payable.

A problem arises with the ascertainment of the amount payable as commission. The reason is that commission may be paid at a certain percentage before or after charging such commission. If the commission is paid before charging commission, calculation is very easy. We simply multiply the rate with the profits.

13. Goods Sent on Approval Basis

When goods are sold to the customers on sale or return basis or on approval basis, it is not considered as sale till the time it is not approved by the customer or till the expiry of a fixed period as agreed by the parties. When goods are sold initially to a customer on approval basis, we pass the entry for the sales. At the year-end, if the goods are still lying with the customers awaiting approval, the following entries are to be passed:

(i) To cancel previous entry

Sales Account Dr.

To Sundry Debtors Account

(ii) To add the value of the closing stock (Cost of goods lying with the customer):

Stock Account Dr.

To Trading Account

In the Balance Sheet, it will be deducted from sundry debtors at sales price and the closing stock will be increased by the cost of such sales.

14. Interest on Loan- Not yet Paid- Fully or partly

In the Trial Balance, the amount of the loan appears in the credit column. The amount of interest paid appears on the debit column. However, if a portion of the interest is still outstanding at the year-end, we pass the following entry to make the adjustment:

Interest on Loan Account Dr.

To Loan Account

If nothing has been paid as interest, we are to find out the amount by applying the rate with the amount of the loan and then pass the above entry. The total amount of unpaid interest will appear in the Balance Sheet as liability.

15. Interest on Capital

Sometimes, it may be required to make a provision for interest on the capital contributed by the proprietor or the partner. Such interest is not a charge against profit but an appropriation of profit. In this connection, the following two entries have to be passed:

(i) Profit & Loss Appropriation Account Dr.

To Interest on Capital Account

(Being interest on capital payable)

(ii) Interest on Capital Account Dr.

To Capital/Current Account

(Being interest on capital transferred to Capital/Current Account)

16. Interest on Drawings

Sometimes, interest on drawing may be charged to restrict the frequent drawings by the partners. Such interest increases the divisible profit. The following two entries have to be passed:

(i) Capital/Current Account Dr.

To Interest on Drawing Account

(Being interest on Drawing Transferred to Capital/Current Account)

(ii) Interest on Drawings Account Dr.

To Profit and Loss Appropriation Account

(Being interest on drawings Charged)

2.3.6 Difference between Trading A/c and Profit & Loss A/c

Some of the differences between Trading A/c and Profit & Loss A/c are as follows:

Trading account is the account showing the Gross Profit of a business, whereas, the Profit & Loss Account shows the Net Profit of a business.
Gross Profit = Sales Turnover - Cost of goods sold (opening stock + purchases + carriage inwards-closing stock)

Net Profit = Gross Profit + Revenue (rent received, interest received, discount received) - Expenses

All direct expenses/revenues that are directly related to the factory or production are included in a Trading A/c. On the other hand, all Indirect Expenses/revenues that are related to the Administration & Selling are included in a P&L A/c.

The gross profit or loss, which is derived from the Trading Account, shows the trend of the business and the Profit & Loss account reflects on the management of the business and the outcomes of the concern.

	Study Notes

	Assessment

1. Discuss the following and determine where they appear:
   a. Gross profit
   b. Gross loss
   c. Factory expenses.

	Discussion

1. Discuss the distinctive features of Trading and Profit and Loss Account.

2.4 Balance Sheet

A Balance Sheet or statement of financial position is a summary of the financial balances of a sole proprietorship, a business partnership or a company. Assets, liabilities and ownership equity are listed as of a specific date, such as the end of the financial year. It is a statement of assets and liabilities, which helps us to establish the financial position of a business enterprise on a particular date, i.e. on a date when financial statements or final accounts are prepared or books of accounts are closed. In fact, this statement treats the balances of all those ledger accounts that have not yet been squared up. These accounts relate to assets owned, expenses due but not paid, incomes accrued but not received or certain receipts which are not due or accrued. In other words, it deals with all those real and personal accounts, which have not been accounted for in the Manufacturing, Trading or Profit & Loss Accounts. Besides, a Balance Sheet also treats all those items given in the adjustments, which affect Real or Personal Accounts. The Nominal accounts are treated in the income statement in the usual manner. A Balance Sheet is often described as a "snapshot of a company's financial condition". It aims to ascertain the nature and amount of different assets and liabilities so that the financial position such as liquidity or solvency position could be evident to all those interested. Therefore, an important feature of a Balance Sheet is to show the exact financial picture of a business concern on a particular date.

2.4.1 Difference between Trial Balance and Balance Sheet

The following are the points of difference between Trial Balance and Balance Sheet:

Table 2.3: Difference between Trial Balance and Balance Sheet

Trial Balance	Balance Sheet
The purpose of preparing a trial balance is to check the arithmetic accuracy of account books.	A Balance Sheet is drafted to reveal the financial position of the business.
A trial balance is prepared to document that the total amount of account balances with debit balances is equal to the total amount of account balances with credit balances.	A Balance Sheet shows that the total of the asset amounts is equal to the total of the amounts of liabilities and stockholders' equity.
It is prepared before the preparation of Trading and Profit & Loss Account.	It is prepared after the preparation of Trading and Profit & Loss account.
It does not contain the value of the closing stock of goods.	It contains the value of the closing stock, which appears on the assets side.
Expenses due but not paid and incomes due but not received do not appear in the Trial Balance.	Expenses due but not paid appear on the liability side and income due but not received appears on the asset side of the

	Balance Sheet.
In case of Trial Balance, the columns are named as 'debit' and 'credit' columns.	The two sides of Balance Sheet are called 'liabilities' and 'assets' sides respectively.
It is a list of balance extracted from the ledger accounts.	It is a statement of assets and liabilities.
A Trial Balance is an internal document used only within the accounting department.	The Balance Sheet is referred to as an external report because it is used outside of the company by investors, lenders and others.
It contains the balance of all accounts- real, nominal and personal.	It contains the balance of only those accounts, which represent assets and liabilities.

2.4.2 PREPARATION AND PRESENTATION OF BALANCE SHEET

The Process of preparation and presentation of Balance Sheet involves two steps:

- **Grouping**
- **Marshalling**

In the first step, the different items to be shown as assets and liabilities in the Balance Sheet are grouped appropriately. For this purpose, items of similar nature are grouped under one head so that the Balance Sheet could convey an honest and true message to its users. For example, stock, debtors, bills receivables, Bank, Cash in Hand etc are grouped under the heading Current Assets and Land and Building, Plant and Machinery, Furniture and Fixtures, Tools and Equipments under Fixed Assets. Similarly Sundry creditors for goods must be shown separately and distinguished from money owing, other than due to credit sales of goods.

The second step involves marshalling of assets and liabilities. This involves a sequential arrangement of all the assets and liabilities in the Balance Sheet. There are two methods of presentation:

- The order of liquidity

- The order of permanence

Under liquidity order, assets are shown on the basis of liquidity or reliability. These are rearranged in an order of most liquid, more liquid, liquid, least liquid and not liquid (fixed) assets. Similarly, liabilities are arranged in the order in which they are to be paid or discharged.

Under the "Order of performance", the assets are arranged on the basis of their useful life. The assets predicted to be most fruitful for the business transaction for the longest duration will be shown first. In other words, this method puts the first method in the reserve gear. Similarly, in case of liabilities, after capital, the liabilities are arranged as long term, medium term, short term and current liabilities.

Following are the respective formats of Balance Sheet to bring out the clarity of concept:

Table 2.4: Liquidity Order

BALANCE SHEET OF…

As on …

Liabilities	**Amount** **Rs.**	**Assets**	**Amount** **Rs.**
Current Liabilities Bank Overdraft Outstanding Expenses Bills Payable Sundry Creditors Income received in Advance Long term Liabilities		Current Assets Cash in hand Cash at Bank Marketable Securities Short term Investment Bills receivables Sundry Debtors Prepaid Expenses	

Mortgaged loan Loan of Bank Capital Add Profit Less Loss Less Drawings		Accrued Income Long term Investment Fixed Assets Furniture & Fixtures Motor Vehicles Tools & Equipments Plant & machinery Land and Building Intangible Assets Patents Copy rights Trademarks Goodwill	

Table 2.5: Order of Permanence

BALANCE SHEET OF…

As on …

Liabilities	Amount Rs.	Assets	Amount Rs.
Capital Add Profit Or Less Loss Less Drawings Long term		Fixed Assets Goodwill Land and Building Plant & machinery Tools & Equipments Motor Vehicles	

Liabilities Mortgaged Loan Loan from Bank Current Liabilities Income received in Advance Sundry Creditors Bills Payable Outstanding Expenses Bank Overdraft		Furniture & Fixtures Patents Trademarks Investments (Long term) Current Assets Stock Sundry Debtors Bills receivables Short term Investment Marketable Securities Cash and Bank Balance Fictitious Assets Advertisement Profit & Loss Account Miscellaneous Expenses	

2.4.3 Explanation and Clarification of Certain Items

For a better understanding of how various items should be placed, it is important to know the type and nature of assets and liabilities that are to be classified and arranged in either of two orderly manners discussed earlier. For the purpose of presentation of assets in the Balance Sheet, assets are classified as under:

- Fixed Assets
- Intangible Assets
- Current Assets
- Fictitious Assets
- Wasting Assets
- Contingent Assets

Fixed assets: Fixed assets are those assets, which are acquired for the purpose of producing Goods or rendering services. These are not held for resale in the normal course of business. Fixed assets are used for the purpose of earning revenue and hence these are held for a longer duration. These are also treated as 'Gross Block' and 'Net Block' (Fixed assets after depreciation). Investment in these assets is known as 'Sunk Cost'. Examples of fixed assets are Land & Building, Plant and Machinery, Furniture and Fixtures, Tools and Equipment, Motor vehicles etc. All fixed assets are tangible by nature.

Intangible assets: Intangible assets are those capital assets, which do not have any physical existence. Although these assets cannot be seen or touched, they are long lasting and prove to be profitable to owner by virtue of the right conferred upon them by mere possession. They also help the owner to generate income. Goodwill trademarks, copyrights and patents are the examples of intangible assets.

Current assets: Current assets include cash and other assets, which are converted or realized into cash within a normal operating cycle or say, within a year. These are acquired for resale, assisting and helping the process of production, rendering service or supplying of goods. These assets constantly keep on changing their form and contribute to routine transactions and operations of business. Examples are Cash, Bank, Bills Receivables, Debtors, Stock, Prepaid expenses etc. Current assets are also known as Floating Assets or Circulating Assets.

Liquid or quick assets: Those current assets, which can be converted into cash at a very short notice or immediately, without incurring much loss or exposure to high risk, are quick assets. Quick assets can be worked out by deducting Stock (raw materials, work-in-progress or finished goods) and prepaid expenses out of total current assets.

Fictitious assets: These are the non-existent worthless items which represent unwritten-off losses or costs incurred in the past, which cannot be recovered in future or realised in cash. Examples of such assets are preliminary expenses (formation expenses), Advertisement suspense, Underwriting commission, Discount on issue of shares and debentures, Loss on issue of debentures and Debit balance of Profit & Loss Account. These fictitious assets are written off or wiped out by debiting them to Profit & Loss Account.

Wasting assets: An asset that has a limited life and therefore dwindles in value over time is a wasting asset. This type of asset has a limited useful life by nature and depletes over a limited duration. These assets become worthless once their utility is over or exhausts fully. During the life of productive usage, assets of this type produce revenue, but eventually reach a state where the worth of the assets begins to diminish. Such assets are natural resources like timber and coal, oil, mineral deposits etc.

Contingent assets: Contingent assets are probable assets, which may or may not become assets, as that depends upon occurrence or non-occurrence of a specified event or performance or non-performance of a specified act. For example, a suit is pending in the court of law against ownership title of a disputed property. Subsequently, if the verdict goes in favour of the business concern, it becomes the asset of the concern. However, if the business firm does not win the lawsuit, it will not have ownership rights of the property; it will be of no use to it. Thus, it remains a contingent asset as long as the judgment is not pronounced by court. Such assets are shown by means of footnotes and hence do not form part of assets shown in the Balance Sheet. Besides this, hire-purchase contract, uncalled share capital etc are the other examples of contingent assets.

CLASSIFICATION OF LIABILITIES

Long-term liabilities: These are the obligations that the business enterprise is expected to meet after a relatively long period. Such liabilities do not become due for payment in the ordinary course of business operation or within normal operating cycle. Debentures, long-term loans from banks or financial institutions are the examples of long-term liabilities.

Current liabilities: Current liabilities are those liabilities that are payable within normal operating cycle, i.e. within a given accounting year. These may arise out of realization from current assets or by creating fresh, current liability (obligation). Trade creditors, Bills payable, Bank overdraft, outstanding expenses, short–term loan (payable within twelve months or within the accounting year) are examples of current liabilities.

Contingent liabilities: These liabilities may or may not be sustained by an entity depending on the outcome of a future event such as a court case. These liabilities are recorded in a company's accounts and displayed in the Balance Sheet when both probable and reasonably estimable. It is not an actual liability but an anticipated (probable) liability, which may or may not become payable. It depends upon the occurrence of certain events or performance of certain acts. An element of uncertainty is always attached to a contingent liability; it is a potential liability that may or may not become a sure liability. Contingent liabilities are exemplified in the liability for bills discounted, liability for acting as surety, liability arising on a suit for damages pending in the court of law, liability for calls on partly paid shares etc. If a parent guarantees a daughter's first car loan, the parent has a contingent liability. If the daughter makes her car payments and pays off the loan, the parent will have no liability. If the daughter fails to make the payments, the parent will have a liability. Contingent liabilities are shown as footnotes under the Balance Sheet.

In accounting, a contingent liability and related contingent loss are recorded with a journal entry only if the contingency is probable as well as estimable. If a contingent liability is only possible (not probable) or if the amount cannot be estimated, a journal entry is not required. However, a disclosure is required. When a contingent liability is remote (such as a nuisance suit), neither a journal nor a disclosure is required.

2.4.4 LIMITATIONS OF BALANCE SHEET

Though a Balance Sheet is prepared by every organisation for disclosing its financial position, it is not free of limitations. They can be enlisted as follows:

1. Fixed assets are shown in the Balance Sheet as historical cost less depreciation up to date. A conventional Balance Sheet cannot reflect the true value of these assets. Again, intangible assets are shown in the Balance Sheet at book values, which may bear no relationship to market values.
2. Sometimes, the Balance Sheet contains some assets that command no market value, such as preliminary expenses, debenture discount, etc. The inclusion of these fictitious assets unduly inflates the total value of assets.
3. A Balance Sheet cannot calculate and show the value of certain qualitative factors like knowledge and efficiency of staff members.
4. A conventional Balance Sheet may mislead untrained readers in inflationary situations.

The value of majority number of current assets depends upon some estimates, so it cannot reflect the true financial position of the business.

	Study Notes

	Assessment
1. What are the problems in balance sheet.	

	Discussion
1. Discuss valuation of fixed assets in balance sheet.	

2.5 Illustrations

Illustration 1

From the following balances extracted from the books of a Trader at the close of the accounting year ending 31st December 2000, prepare Profit & Loss Account.

Trial Balance as on 31st Dec. 2000

Particulars	**Rs.**	**Particulars**	**Rs.**
Gross Profit	1,53,000	Apprenticeship Premium	5,000
Salaries	46,500	Dividend Received	12,000

Rent (Office)	12,300	Interest Received	8,000
Fire Insurance	2,700	Rent Received	5,000
Premium	1,500		
Discount Allowed	7,500		
Carriage Outward	6,300		
Bad Debts	750		
Printing and Stationary	21,500		
Selling Expenses	1,050		
Rent, Rates and Taxes	8,000		
Loss by Fire (not covered by Insurance)	2,000		
Legal Charges Godown Rent	12,700		
Depreciation on Office Equipment	5,500		
Repairs and Maintenance	4,800		
Bank Charges	1,200		

Salaries due but not paid Rs. 2,500. Fire Insurance Premium has been in advance to the extent of Rs. 300. Rent, rates and Tax outstanding Rs. 150.

Solution:

PROFIT & LOSS ACCOUNT

For the year ended on 31st December 2000

Dr. Cr.

Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To Salaries 46,500 Add O/s 2,500	49,000	By Gross Profit b/d	1,53,000
To Rent (Office)	12,300	By Apprenticeship Premium	5,000
To Fire Insurance Premium 2,700 Less Prepaid 300	2,400	By Dividend Received	12,000
To Bank Charges	1,200	By Interest Received	8,000
To Carriage Outward	7,500	By Rent Received	5,000
To Printing and Stationary	750		
To Rent, Rates and Taxes 1050 Add Outstanding 150	1,200		
To Selling Expenses	21,500		
To Bad Debts	6,300		
To Discount Allowed	1,500		
To Loss by Fire	8,000		
To Legal Charges	2,000		

To Godown Rent	12,700		
To Repairs and Maintenance	4,800		
To Depreciation (of Office Equipment)	5,500		
To Net Profit Transferred to Capital Account	46,350		
	1,83,000		1,83,000

Illustration 2

The following is the Trial Balance of Mr. Bharat on 31st December 1987:

Particulars	**Dr.**	**Cr.**
	Rs.	Rs.
Capital		4,000
Plant & Machinery	5,000	
Office furniture and fittings	260	
Stock as on 1st January, 1987	4,800	
Motor Van	1,200	
Sundry Debtors	4,570	
Cash in hand	40	
Cash at bank	650	
Wages	15,000	
Salaries	1,400	
Purchases	21,350	

Sales		48,000
Bills Receivable	720	
Bill Payable		560
Sundry Creditors		5,200
Returns inwards	930	
Provision for doubtful debts		250
Drawings	700	
Returns outwards		550
Rent	600	
Factory lighting and heating	80	
Insurance	630	
General Expenses	100	
Bad Debts	250	
Discount	650	
Total	58,930	

The following adjustments are to be made:

1. Stock on 31st December, 1987 Rs. 5,200
2. 3 moths factory lighting and heating is due, but not paid Rs. 30
3. 5% depreciation to be written-off on furniture
4. Write-off further bed debts Rs. 70
5. The provision for doubtful debts to be increased to Rs. 300 and provision for discount on debtors @ 2% to be made
6. During the year, machinery was purchased for Rs.2,000, but it was debited to Purchases Account.

You are required to make the necessary Journal entries. You are also required to prepare Trading and Profit & Loss Account and the Balance Sheet.

Solution:

In the books of Mr. Bharat

Journal **Dr.** **Cr.**			
Date	**Particulars**	**Rs.**	**Rs.**
1987	Adjustment Entries		
Dec, 31	Factory Lighting and Heating A/c Dr.	30	
	To Outstanding Factory Lighting and Heating A/c		30
	(Being Adjustment for outstanding Factory Lighting and Heating)		
	Depreciation A/c Dr.	13	
	To Office Furniture & Fittings A/c		13
	(Being amount written off as depreciation on furniture @ 5% on Rs. 260)		
	Bad Debts A/c Dr.	70	
	To Sundry Debtors A/c		70
	(Being bad Debts written-off)		
	Plant and Machinery A/c Dr.	2,000	
	To Purchases A/c		2,000
	(Being purchase of machinery wrongly debited to Purchases Account, now rectified)		
	Profit & Loss A/c Dr.	134	
	To provision for Bad & Doubtful Debts A/c(Rs. 300-Rs. 250)		50

Journal Dr. Cr.			
Date	**Particulars**	**Rs.**	**Rs.**
	To Provision for discount on Debtors A/c		84
	(Being the creation of necessary provision for doubtful debts and discount on Debtors)		
	Closing Entries Trading A/c Dr.	38,710	
	To Opening Stock A/c		4,800
	To Purchases A/c		18,800
	To Wages A/c		15,000
	To Factory Lighting and Heating A/c		110
	(Being various Account transferred to the Trading Account)		
	Sales A/c Dr.	47,070	
	To Trading A/c		47,070
	(Being sales Account transferred to the Trading Account)		
	Stock A/c Dr.	5,200	
	To Profit & Loss A/c		5,200
	(Being gross Profit transferred to the credit of the Trading Account)		
	Trading A/c Dr.	13,560	
	To Profit & Loss A/c		13,560
	(Being discount received transferred to the credit of the Profit & Loss A/c)		
	Profit & Loss A/c Dr.	3,713	

Journal			
Dr.		Cr.	
Date	**Particulars**	**Rs.**	**Rs.**
	To Salaries A/c		1,400
	To Rent A/c		600
	To Insurance A/c		630
	To General Expenses A/c		100
	To Discount A/c		650
	To Bad Debts A/c		320
	To Depreciation on Furniture & Fittings A/c		13

In the books of Mr. Bharat

Trading and Profit & Loss Account

For the year ended on 31st, December 1987

Dr. Cr.

Particulars	**Rs.**	**Rs.**	**Particulars**	**Rs.**	**Rs**
To Opening Stock		4,800	By Sales	48,000	
To Purchases	21,350		Less: Returns inwards	930	47,070
Less: Returns outwards	550		By Closing Stock		5,200
Less: Machinery Purchase	2,000	18,800			52,270
To Wages		15,000	By Gross Profit b/d		13,560
To Factory lighting & Heating	80		By Discount		370
Add: Outstanding	30	110			

Particulars	**Rs.**	**Rs.**	**Particulars**	**Rs.**	**Rs**
To Gross Profit c/d		13.560			
To Salaries		2,270			
To Rent		1,400			
To Insurance		600			
To General expenses		630			
To Discount		100			
To Bad Debts		650			
Add: Further Bad Debts	250				
To Provision for Doubtful Debts	70	320			
New	300				
Less: old	250	50			
To Prov. For disc. On Debtors @ 2% on Rs. 4,200		84			
To depreciation on furniture @ 5 on Rs. 260		13			
To Net Profit (transferred to capital Account)		10,083			
		13,930			13,930

Balance Sheet of Mr. Bharat

As on 31st December 1987

Liabilities	**Rs.**	**Rs.**	**Assets**	**Rs.**	**Rs.**
Capita:			Plant & Machinery	5,000	
Opening Balance	4,000		Addition Motor Van	2,000	7,000
Add: Net Profit	10,083		Office furniture	260	
Less: Drawings	700	13,383	Less: Depreciation @ 5%	13	247
Bill Payable		560	Sundry Debtors	4,500	
Sundry creditors		5,200	Less: provision for bad debts	300	
Outstanding factory lighting & heating		30	Less: Provision discount on debtors	84	4,116
			Closing Stock		5,200
			Bills receivable		720
			Cash at bank		650
			Cash in hand		40
		19,173			19,173

2.6 Introduction to Financial Statements

A financial statement (or financial report) is a formal record of the financial activities of a business, person or other entity. For a business enterprise, all the relevant financial information, presented in a structured manner and in a form easy to understand, is termed the financial statements. They typically include four basic financial statements:

1. Balance Sheet: Also referred to as statement of financial position or condition, it reports on a company's assets, liabilities and ownership equity at a given point in time
2. Income statement: Also referred to as Profit and Loss statement (or a "P&L"), it reports on a company's income, expenses and profits over a period of time. Profit & Loss account presents information on the operations of the enterprise. These include sales and various expenses incurred during the processing state.
3. Statement of retained earnings: This explains the changes in a company's retained earnings over the reporting period.
4. Statement of cash flows: It reports on a company's cash flow activities, particularly its operating, investing and financing actions.

For large firms, these statements are often complex and may include an extensive set of notes or appendices attached to the financial statements, coupled with management discussion and analysis. The notes typically describe each item on the Balance Sheet, income statement and cash flow statement in further detail. Notes to financial statements are considered an integral part of the financial statements.

2.6.1 Meaning and Type of Financial Statements

A financial statement is an organised collection of data prepared in accordance with logical and consistent accounting procedures. Its function is to convey an understanding of key financial aspects of a business firm. It may show a position at a moment in time, as in the case of a Balance Sheet or may reveal a series of activities over a given duration, as in the case of an Income Statement.

Thus, the term financial statements generally refer to two basic statements: (i) the Income Statement (ii) the Balance Sheet. Furthermore, a business may also prepare (iii) a Statement of Retained Earnings (iv) a Statements of Changes in Financial Position in addition to the above two statements.

- **Income Statement:** The Income Statement (also termed as Profit & Loss Account) is usually considered as the most useful of all financial statements. It renders an explanation about what has happened to a business on account of operations between two Balance Sheet dates.

- **Balance Sheet**: It depicts the financial position of a business concern at a particular point of time. It represents all assets owned by the business and the claims (or equities) of the owner or outsiders against those assets at a specific moment in time.
- **Statement of retained earnings**: The term 'retained earnings' implies the accumulated excess of earnings over losses and dividends. The balance shown by the Income Statement is transferred to the Balance Sheet through this statement, after making necessary appropriations. Thus, it acts as a connecting link between the Balance Sheet and the Income Statement.
- **Statement of changes in financial position-** The Balance Sheet depicts the financial condition of a business concern at a given point of time while the Income Statement reveals the ultimate outcome of operations of business over a period of time. But, in order to gain an unmistakable understanding of the business affairs, it is important to identify the movement of working capital or cash in and out of the business. This information is made accessible in the statement of changes in financial position of the business.

2.6.2 NATURE OF FINANCIAL STATEMENTS

According to the American Institute of Certified Public Accountants, financial statements reflect "a combination of recorded facts, accounting conventions and personal judgments and the judgments and conventions applied affect them materially". This implies that data exhibited in the financial statements is affected by recorded facts, accounting conventions and personal judgments.

1. **Recorded Facts:** The facts recorded in the books of accounts are known as Recorded Facts. Facts, which have not been recorded in the financial books, are not depicted in the financial statements, however material they might be. For example, fixed assets are shown at cost irrespective of their market or replacement price since such price is not recorded in the books.

2. **Accounting Conventions:** Accounting conventions imply certain fundamental accounting principles, which have been sanctified by long usage. For example, on account of the convention of 'Conservatism', provision is made for expected losses but expected profits are ignored. This means that the real financial position of the business may be much better than what has been shown by the financial statements.

3. **Personal Judgments:** Even personal judgments have a fair amount of influence on the financial statements. For example, it is the choice of an accountant to choose the

method of depreciation. Similarly, the method of amortisation of fictitious assets also depends on the personal judgment of the accountant.

2.6.3 LIMITATIONS OF FINANCIAL STATEMENTS

The objectives of financial statements are subject to certain limitations as given below:

1. **Financial Statements are essentially interim reports**: The profit exhibited by the Profit & Loss Account and the financial position revealed by the Balance Sheet is not exact. The instances of contingent liabilities, deferred revenue expenditure etc make them more imprecise.

2. **Accounting concepts and conventions:** The preparation of the financial statements is based on certain accounting concepts and conventions. Owing to this, the financial position, as disclosed by these statements, may not be realistic. Because of convention of conservatism, the income statement may not disclose true income of the business; probable losses are taken into consideration while probable incomes are ignored.

3. **Influence of personal judgment:** Many items are left to the personal judgment of the accountant. Examples include the method of depreciation, mode of amortisation of fixed assets, treatment of deferred revenue expenditure etc. All of these depend upon the personal judgment of the accountant. The competency of this opinion relies on the experience and integrity of the accountant.

4. **Disclose only monetary facts**: Financial statements do not portray the facts that cannot be expressed in terms of money. For example, development of a team of loyal and efficient workers, enlightened management, the reputation and prestige of management in the eyes of the public are matters of considerable importance for the business but out of the confines of financial statements. Therefore, financial statements can nowhere reflect such non-monetary aspects.

	Study Notes

	Assessment
1. Explain the term "Financial Statements of the company"	
2. Name the financial statements prepared by company.	

	Discussion
1. Discuss the need of preparing financial statements of the company.	

2.7 Preparation of Company Financial Statements

As shown above, financial statements mainly comprise of two statements, i.e. the Balance Sheet and the income statement or Profit & Loss Account. They are usually prepared at the end of the accounting period; hence, they are also known as financial accounts of the company. In case of companies, the financial accounts have been termed as annual accounts and Balance Sheet. Section 210 of the Companies Act governs the preparation of the financial accounts of a company. Some significant provisions vis-à-vis the preparation of the above accounts are as follows:

1. At every Annual General Meeting of the company, the Board of Directors of the Company shall lay before the company:
    - The Balance Sheet as at the end of the accounting period
    - A Profit & Loss Account for that period

In the case of a company that does not engage in business for profit, an income and expenditure account shall be laid before the company instead of Profit & Loss Account at its Annual General Meeting.

2. The Profit & Loss Account (or the income and expenditure account) relate to the period as per the following premises:

    - In case of first Annual General Meeting of the company: From the date of incorporation of the company to a date not more than 9 months before the meeting
    - In case of any subsequent Annual General Meeting: From the date immediately after the period for which account was last submitted to not more than 6 months before the meeting

The tenure for which the account has been prepared is called the financial year. It may be less or more than a calendar year but it shall not exceed 15 months. However, with the permission of the Registrar, it may extend up to 18 months.

According to Section 211, the Profit & Loss Account and the Balance Sheet of a company must give a true and fair view of the state of affairs of the company. The Balance Sheet should be in form as prescribed in Part I of schedule VI or as near thereto as the circumstances permit. (The form is shown later in the unit.) The Profit & Loss Account should comply with the requirements of Part II of Schedule VI of the Companies Act. Part III of Schedule VI includes just the interpretation of certain terms used in Schedule VI, Part I and Part II. Part IV has been added with effect from 15.5.1965. Part IV comprises of Balance Sheet Abstract in a Company's General Business Profile.

According to Companies (Amendment) Act 1999, every Profit & Loss Account and Balance Sheet has to comply with the accounting standards as issued by the Institute of Chartered Accountants of India, in consultation with National Advisory Committee on Accounting Standards established under the Companies Act. Where the Profit & Loss Account and Balance Sheet do not comply with accounting standards, such companies shall disclose in its Profit & Loss Account and Balance Sheet the following:

- Deviations from the accounting standards
- Reasons for such deviations
- Financial effects arising from such deviations

The Balance Sheet and Profit & Loss Account of the company have to be duly signed on behalf of the company by specific individuals as per the provisions of Section 215 of the Companies Act. These statements should be accompanied with the Directors' and Auditors' reports. The Directors' report should consist of, besides other prescribed particulars, the amount, if any which, the board recommends to be paid by way of dividend and a statement showing the name of every employee of company who has been paid remuneration for that at a rate not less than Rs.2,00,000 per month (raised from Rs.1,00,000 p.m. w.e.f. 17.4.2002).

A copy of the Profit & Loss Account and Balance Sheet along with the Directors' and Auditors' reports should be sent not less than 21 days prior to the date of the Annual General Meeting to every member of the company, every debenture holder and every trustee of the debenture holders. Three copies of such accounts and reports must be filed with the Registrar within 30 days from the date on which they were submitted in the meeting.

In the following pages, we are giving the particulars as required by Schedule VI in respect of both the Profit & Loss Account and the Balance Sheet and the special points that the students must keep in mind while preparing them.

2.7.1 PROFIT & LOSS ACCOUNT

Requirements of Profit & Loss Account

The requirements of Profit & Loss Account can be categorised into two parts:

- General Requirements
- Special Requirements as per Schedule VI, Part II

1. General Requirements: These are related to three matters:

a. **Heading:** In case of companies, it is not essential to segregate the Profit & Loss Account into three sections, viz. Trading Account, Profit & Loss Account and Profit and Loss Appropriation. It must also be noted that dividing the account into three sections is not prohibited and should be done to give a better idea regarding the profit earned and distributed by the company during a particular period.

The Profit & Loss Account can be prepared under two headings:

- Profit & Loss Account giving details regarding the Gross Profit and the Net Profit earned by the company during a particular period
- Profit & Loss Appropriation Account giving details regarding the Balance of Profit & Loss Account brought forward from the last year, the Net Profit (or loss) trend (or made) during the year and appropriations made during the year

Items shown in the Profit & Loss Account are popularly termed as items appearing "above the line" whereas the items shown in the Profit & Loss Appropriation Account are popularly termed as items appearing "below the line".

b. **Provision for Taxation:** Companies are liable to pay income tax at a high rate. Usually the tax rate is about 40% or more of the taxable profit. Though provision for taxation is an appropriation of profits, the common practice is to show it "above the line", i.e. in the Profit & Loss Section and not in Profit & Loss Appropriation Section. In other words, profit after tax is taken from "Profit & Loss Account" to "Profit & Loss Appropriation" account. However, tax for a previous period, now provided or refunded for, is charged or credited to the Profit & Loss Account.

c. **Accounting Year:** Though the Companies Act permits a company to select any period of 12 months as its accounting year, tax laws have made it almost obligatory for every company to close its books of accounts on 31st March every year.

2. Special Requirements as per Schedule VI, Part II: The Profit & Loss Account of a company must be prepared in accordance with the requirement of Part II of Schedule VI of the Companies Act, 1956. These requirements are summarized as follows:

The Profit & Loss Account should clearly reveal the result of the working of the company during the period covered by the account. It should reveal separately the incomes and expenses of a non-recurring nature and exceptional transactions. The Profit & Loss Account should particularly disclose information in respect of the following items:

a. The turn-over of the company

b. Commission paid to sole-selling agents

c. Commission paid to other selling agents

d. Brokerage and discount on sales other than the usual trade discount

e. Opening and closing of goods, purchases made or cost of goods manufactured or value of services rendered during the period covered by the account

f. Interest on company's debentures and other fixed loans

g. Amount charged as income tax

h. Remuneration payable to the managerial personnel

i. Amount paid to auditor for services rendered as auditor and as advisor in any other capacity, viz. taxation matters, company law matters, management services etc.

j. The details of licensed, installed and actual capacity utilised

k. Value of imports, earnings in foreign exchange and amounts remitted during the year in foreign currencies on account of dividends

For the sake of convenience of the students, we are giving below the format of Profit & Loss Account of a company:

Table 2.6: Profit & Loss Account

….. Company Limited

PROFIT & LOSS ACCOUNT

For the year...

Dr. Cr.

To Opening Stock	...	By Sales (less return)	...
To Purchase (less returns)	...	By Closing Stock	...
To Wages	...	By Gross Loss (c/d)*	...
To Manufacturing Expenses	...		
To Gross Profit (c/d)*	...		
	...		...
To Gross Loss b/d*	...	By Gross Profit b/d*	...
To Salaries	...	By Dividends	...
To Rent	...	By Net Loss c/d**	...
To Insurance	...		
To Lighting	...		
To Auditors' Fees	...		
To Depreciation	...		
To Traveling & Conveyance	...		
To Printing & Stationery	...		
To Managing Director's Remuneration	...		

To Provision for Taxation	…		
To Net Profit c/d**	…		
	…		…

* / ** Of the two, only one figure will appear.

Table 2.7: Profit & Loss Account

PROFIT & LOSS APPROPRIATION ACCOUNT

For the year ending …

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Net Loss for the year*	…	By Balance b/d	…
To Transfer to Reserves	…	By Net profit for the year*	…
To proposed Dividends	…	By Balance c/d**	…
To Balance c/d**			
	…		…

* / ** Of the two, only one figure will appear.

2.7.2 BALANCE SHEET REQUIREMENTS

According to Section 210 of the Companies Act, it is mandatory for a company to prepare a Balance Sheet at the end of each trading period. Section 211 requires the Balance Sheet to be set up in the prescribed form. This provision is not applicable to banking, insurance, electricity and other companies governed by special Acts. The Central Government also holds the power to exempt any class of companies from compliance with the requirements of the prescribed form, in case it appears to be in public interest. The object of prescribing the form is to elicit proper information from the company for presenting a 'true and fair' view of the state of the company's affairs. By this principle, both window dressing and creating secret reserves will be considered against the provisions of Section 211.

Schedule VI, Part I gives the prescribed form of a company's Balance Sheet. Notes and instructions regarding various items are given under any of the items or sub-item. If the prescribed form cannot be conveniently given under any item due to lack of space, it can be given in a separate schedule or schedules. Such schedules will be annexed to and form part of the Balance Sheet.

Schedule VI, Part I permits the presentation of Balance Sheet both in horizontal as well as vertical forms. These forms with necessary notes, explanations, etc. are given below:

Table 2.8: Horizontal form of Balance Sheet

HORIZONTAL FORM OF BALANCE SHEET

SCHEDULE VI PART 1

(Section 211)

Balance Sheet of … (The name of the company will be entered here.)

As on … (The date on which the Balance Sheet is prepared will be entered here.)

Figures for the previous year Rs.	**Liabilities**	**Figures for the current year Rs.**		**Figures for the previous year Rs.**	**Assets**	**Figures for the current year Rs.**
	Share Capital Authorised: …shares of Rs… each Issued: (distinguishing between the various classes of capital and stating the particulars specified below, in respect of				Fixed Assets Distinguishing as far as possible between expenditure upon (a) Goodwill (b) Land (c) Building (d) Leaseholds (e) Railway sidings (f) Plant and	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	each class)... Shares of Rs...each Subscribed: (distinguishing between the various classes of capital and stating the particulars specified below, in respect of each class)... Shares of Rs... called up. (Of the above shares, ... shares are allotted as fully paid up, pursuant to a contract without payment being received in cash. Of the above shares... shares				Machinery (g) Furniture and Fittings (h) Development of property (i) Patents, Trade Marks and Designs (j) Livestock and (k) Vehicles, Etc. (Under each head, the original cost and the additions thereto and deductions therefrom during the year and the total depreciation written off or provided up to the end of the year is to be stated. Depreciation written off or	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	are allotted as fully paid up by way of bonus shares) Specify the source from which bonus shares are issued, e.g. capitalization of profits or Reserves or from Securities Premium Account. Less: Call unpaid: (i) By directors (ii) By others Add: Forfeited Shares: (amount originally paid up) (Any capital profit on reissue of forfeited				provided shall be allotted under the different asset heads and deducted in arriving at the value of Fixed Assets. In every case where the original cost cannot be ascertained, without unreasonable expense or delay, the valuation shown by the book is to be given for the purpose of this paragraph. Such valuation shall be the net amount at which an asset stood in the company's books at the commencement	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	shares should be transferred to Capital Reserves) Note: 1. Terms of redemption or conversion (if any) of any redeemable preference capital are to be stated together with earliest date of redemption or conversion. 2. Particulars of any option on unissued Share Capital are to be specified. 3. Particulars of the different classes of preference shares are to				of this Act after deduction of the amounts previously provided or written off for depreciation or diminution in value and where any such asset is sold, the amount of sale proceeds shall be shown as deduction. Where sums have been written off on a reduction of capital or a revaluation of assets, every Balance Sheet (after the first Balance Sheet) subsequent to the reduction or revaluation shall show the reduced figures with the date.	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	be given. These particulars are to be given along with Share Capital. Shares held by the holding company as well as by the ultimate holding company and its subsidiaries shall be separately stated in respect of Subscribed Share Capital (The auditor is not required to certify the correctness of such share-holdings as certified by the management) Reserves and Surplus:				First five years subsequent to the date of the reduction shall show also the amount of the reduction made. Similarly, where sums have been added by writing up the assets, every Balance Sheet subsequent to such writing up shall show the increased figures with the date of the increase in place of the original cost. Each Balance Sheet for the first five years subsequent to the date of the writing up shall also show the amount in increase made).	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	(1) Capital Reserves (2) Capital Redemption Reserves between: (3) Securities Premium Account (Showing detail of its utilization in the manner provided in Section 78 in the year of utilization) (4) Other Reserves specifying the nature of each Reserve and the amount in respect thereof Less: Debit balance in Profit & Loss Account (if				Investments: Showing nature of investment and mode of valuation, for example, cost or market value and distinguishing between: (1) Investments in Government or Trust Securities (2) Investments in Shares, Debentures of Bonds) (Showing separately share fully paid up and Partly paid up and also distinguishing the different classes of shares and showing also in similar details investments in	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	any). (The debit balance in the Profit & Loss Account shall be shown as a deduction from the uncommitted (5) Surplus, i.e. balance in profits and loss account after providing for proposed allocation, namely: dividends, bonus and reserves (6) Proposed additions to Reserves (7) Sinking Funds Additions and deductions since last Balance Sheet to be shown under each of				shares, debentures or bonds of subsidiary companies). (3) Immovable Properties (4) Investments in Capital of Partnership Firms (Aggregate amount of Company's quoted investments and also the market value thereof shall be shown). (Aggregate amount of Company's unquoted investments shall be shown). Current Assets, Loans and Advances (A) Current	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	the specified heads. The word "fund" in relation to any "Reserve" should be used only where such Reserve is specifically represented by earmarked investments. Secured Loans: (1) Debentures (2) Loans and Advances from Bank (3) Loans and Advances from subsidiaries (4) Other Loans and Advances (Loans from directors and / or managers should be shown separately)				Assets (1) Interest accrued on Investments (2) Stores and Spare Parts (3) Loose Tools (4) Stock-in-trade (5) Work-in-Progress (in respect of (2) and (4) mode of valuation of shall be stated and the amount in respect of raw materials shall also be stated separately where practicable. Mode of valuation of work-in-progress shall be stated). (6) Sundry	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	Interest accrued and due on Secured Loans should be included under the appropriate sub-heads under the head “Secured Loans.” The nature of security is to be specified in each case. Loans under each head. In case of Debentures, terms of redemption or conversion (if any) are to be stated together with earliest date of redemption or conversion. Unsecured				Debtors (a) Debts outstanding for a period exceeding six Debtors shall include the amounts due in respect of goods sold or services rendered or in respect of other contractual obligations but shall not include the amounts which are in the nature of loans or advances). In regard to Sundry Debtors, particulars to be given separately or: (a) debts considered good and in respect of which the company is fully secured	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	Loans: (1) Fixed Deposits (2) Loans and advances (from subsidiaries) (3) Short-Term Loans and Advances: (a) From Banks (b) From Others (Short-Term loans include those which are due for repayment not later than one year as on the date of the Balance Sheet. (4) Other Loans and Advances: (a) From Banks (b) From Others				(b) debts considered good for which the company holds no security other than the debtor's personal security (c) Debts considered doubtful or bad Debts due by directors or other officers of the company or any of them either severally or jointly with any other person or debts due by firms of private companies respectively in which any director is a partner or director or a	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	(Loans from directors and /or manager should be shown separately.) Interest accrued and due on Unsecured Loans should be included under the appropriate sub-heads under the head "Unsecured Loans". (Where Loans guaranteed by manager, and /or directors, a mention thereof shall also be made together with the aggregate amount of such loans				member to be separately stated Debts due from other companies under the names of the companies The maximum amount due by directors of other officers of the company at any time during the year to be shown by way of a note The provision to be shown under this head should not exceed the amount of debts stated to be considered doubtful or bad and any surplus of such provision, if	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	under each (1) Acceptances (2) Sundry Creditors (i) Total Dues to small scale undertakings (inserted w.e.f. 2.2.1999) (ii) Total dues of creditors other than small scale industrial undertakings (inserted w.e.f. 2.2.1999) (3) Subsidiary Companies (4) Advance payments and unexpired discounts for the portion for which value is still be given. E.g. in the case of the				already created, should be shown at every closing under “Reserves and Surplus” (in the Liabilities side) under a separate sub-head “Reserve for Doubtful or Bad Debts”). (7A) Cash balance on hand (7B) Bank Balances: (a) With Scheduled Banks (b) With others (In regard to bank balances, particulars to be given separately of (a) the balance lying with Scheduled Banks on	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	following companies: Newspaper, Fire Insurance, Theatres, Clubs, Banking, Steamship companies etc. (5) Unclaimed Dividends (6) Other Liabilities (if any) (7) Interest accrued but not due on loans (The names of small-scale industrial undertakings to whom the company owes any sum including interest which is outstanding from more than 30 days,				current accounts, call accounts and deposit accounts (b) the names of the bankers other than Scheduled Banks and the balances lying with each such banker Accounts and deposit accounts and the maximum amount outstanding at any time during the year with each such banker (c) the nature of the interest, if any of director or his relative in each of the bankers other than Scheduled	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	are to be disclosed (inserted w.e.f. 22.5.2002) B. Provisions (8) Provision for Taxation (9) Proposed Dividends (10) For Contingencies (11) For Provident Fund (12) For insurance, Pension and similar staff benefit schemes. (13) Other provisions (A foot-note to the Balance Sheet may be added to show separately) (1) Claims				Banks referred to in (b) above (B) Loans and Advances: (8) (a) Advances and loans to subsidiaries (b) Advances and loans to partnership firms in which the company or any of its subsidiaries is a partner (9) Bills of Exchange (10) Advances recoverable in cash or in kind or for value to be received, e.g. Rates, Taxes, Insurance etc. (11) Balance with Customs, Port Trust, etc. (where payable on demand)	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	Against the company not acknowledged as debts (2) Uncalled liability on shares partly paid (3) Arrears of Fixed cumulative dividends (The period, for which the dividends are in arrears or if there is more than one class of shares, the dividends on each such class that is in arrears, shall be stated. The amount shall be stated before deduction of income tax, except that in				(The instructions regarding Sundry Debtors apply to "Loans and Advances" also. The amounts due from other companies under the same management within the meaning of subsection (1-B) of Section 370 should also be given with the names of the companies; the Maximum amount due from every one of these at any time during the year must be shown). Miscellaneous Expenditure (to the extent	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	case of the tax-free dividends, the amount shall be shown free of income tax and the fact that it is so shown shall be started). (4) Estimated amount of contracts remaining to be executed on capital account and not provided for (5) Other money for which the company is contingently liable (The amount of any guarantees given by the Company on				not written off or adjusted) (1) Preliminary expenses (2) Expenses including commission, brokerage, underwriting or subscription of shares of debentures (3) Discount allowed on issue of shares of debentures (4) Interest paid out of capital during construction (also starting the rate of interest) (5) Development expenditure not adjusted (6) Other sums (specifying	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs.
	behalf of directors or other officers of the company shall be stated and where practicable, the general nature and amount for each such contingent liability, if material, shall also be specified.				nature) Profit & Loss Account (Show here the debit balance of Profit & Loss account carried forward after deduction of the uncommitted reserves, if any).	

…Limited

Balance Sheet

As on…

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs
	Share Capital Authorised:				Fixed Assets Goodwill	

Figures for the previous year Rs.	Liabilities	Figures for the current year Rs.		Figures for the previous year Rs.	Assets	Figures for the current year Rs
	…Shares of Rs… Each Issued: Share of Rs.… Each …Rs. Per share called up Less: Calls in Arrears Rs… Reserve & Surplus Securities Premium General Reserve Profit & Loss Balance (Profit) Secured Loans Debentures Loans from Banks Unsecured Loans Fixed Deposits Loans from Banks Current Liabilities & Provisions A. Current				Land Building Plant Vehicles Investments Government Securities Shares Debentures and Bonds Current Assets, Loans & Advances A. Current Assets: Stock in trade Loose Tools Work-in-progress Sundry Debtors Cash & Bank Balance B. Loans and Advances Bills of	

Figures for the previous year Rs.	**Liabilities**	**Figures for the current year Rs.**		**Figures for the previous year Rs.**	**Assets**	**Figures for the current year Rs**
	Liabilities Bills Payable Sundry Creditors Unclaimed Dividends B. Provisions Provision for Taxation Proposed Divided Contingent Liabilities (i) Claims against company not acknowledged as debts (ii) Uncalled liability on share partly paid (iii) Arrears of fixed cumulative dividends				Exchange Advances to Subsidiaries Balance with Customs authority Miscellaneous Expenditure Preliminary Expenses Underwriting Commission Discount on Issue of Shares Profit & Loss Account (Loss)	

Table 2.9: VERTICAL FORM OF BALANCE SHEET

Name of the Company________________________________

Balance Sheet as at __________________________________

Particulars	Schedule No.	Figures as at the end of the current financial year		Figures as at the end of the previous financial year	
I. Source of Funds					
(a) Capital	I		……		……
(b) Reserves and Surplus	II		……		……
(2) Loan Funds	III		……		……
(a) Secured Loan	IV		……		……
(b) Unsecured Loans					
Total		……	……	……	……
II. Application of Funds	V	……		……	
(1) Fixed Assets					
(a) Gross Block					
Less: Depreciation Net Block	VI				
(b) Capital Work-in-progress	VII	……	……	……	……
(3) Investments		……		……	
(4) Current Assets, Loans and Advances		……		……	
(a) Inventories					
(b) Sundry Debtors					
(c) Cash and Bank Balances					
(d) Other Current Assets	VIII	……		……	
(e) Loans and Advances		……		……	

Particulars	Schedule No.	Figures as at the end of the current financial year		Figures as at the end of the previous financial year	
Less: Current Liabilities and Provision	VIII	……		……	
(a) Liabilities		……		……	
(b) Provisions		……		……	
Net Current Assets (VII) –		……		……	
(4) (a) Miscellaneous Expenditure to the extend not written off or adjusted					

Study Notes

Assessment

1. What is the requirement of Sec 211 of Companies Act, 1956 regarding preparation of Balance Sheet.

	Discussion
1. Discuss the Horizontal and Vertical Format of Balance Sheet.	

2.8 Summary

The prime objective of accounting is to ascertain how much profit or loss a business organisation has made during any accounting period and to determine its financial position on a given date. Preparing final accounts or financial statements serve this purpose. After the preparation of Trial Balance, the next level of work in accounting is called “Final Accounts” level.

TRADING ACCOUNT

Trading Account is prepared to know the outcome of a trading operation. Trading Account is made with the chief intention of calculating the gross profit or gross loss of a business establishment during an accounting period, which is generally a year.

FORMAT OF A TRADING ACCOUNT

In order to illustrate how the gross profit is ascertained, knowledge of format of the Trading Account is very important. This gives a clear presentation of how the gross profit is calculated. A Trading Account is prepared in “T” form just like every other account is prepared. Though it is an account, it is not just an ordinary ledger account. It is one of the two accounts which are prepared only once in an accounting period to ascertain the profit or loss of the business. Because this account is made only once in a year, no date or journal folio column is provided.

TRADING ACCOUNT ITEMS (DR. SIDE)

- Opening Stock
- Purchases
- Purchases Returns/Returns Outwards
- Direct Expenses

TRADING ACCOUNT ITEMS (CR. SIDE)

- Sales
- Sales Returns / Returns Inward
- Abnormal Loss
- Closing Stock

Balancing of Trading Account

After recording the above items in the respective sides of the Trading Account, the balance is calculated to ascertain Gross Profit or Gross Loss. If the total of credit side is more than that of the debit side, the excess represents Gross Profit. Conversely, if the total of debit side is more than that of the credit side, the excess represents Gross Loss. Gross Profit is transferred to the credit side of the Profit & Loss Account and Gross Loss is transferred to the debit side of the Profit & Loss Account.

Profit & Loss Account

The Profit & Loss Account can be defined as a report that summarises the revenues and expenses of an accounting period to reflect the alterations in various critical areas of the firm’s operations. It indicates how the revenue (money received from the sale of products and services before expenses are withdrawn) is transformed into the net income (the result after all revenues and expenses have been accounted for).

Profit & Loss Account Items (Dr. Side)

- Management Expenses
- Selling and Distribution Expenses
- Maintenance Expenses
- Financial Expenses
- Abnormal Losses

Profit & Loss Account Items (Cr. Side)

The Items that will appear in the credit side of a Profit & Loss Account can be broadly classified as under:

- Gross Profit
- Other Incomes
- Non-trading Income
- Abnormal Gains

Balancing the Profit & Loss Accounts

The balance in the Profit and Loss Account represents the net profit or net loss. If the credit side is more than the debit side, it shows the net profit. Alternatively, if the debit side is more than the credit side, it shows net loss.

DIFFERENCE BETWEEN TRADING A/C AND PROFIT & LOSS A/C

Trading account is the account showing the Gross Profit of a business, whereas, the Profit & Loss Account shows the Net Profit of a business.
Gross Profit = Sales Turnover - Cost of goods sold (opening stock + purchases + carriage inwards-closing stock)

Net Profit = Gross Profit + Revenue (rent received, interest received, discount received) - Expenses

BALANCE SHEET

A Balance Sheet or statement of financial position is a summary of the financial balances of a sole proprietorship, a business partnership or a company. Assets, liabilities and ownership equity are listed as of a specific date, such as the end of the financial year.

PREPARATION AND PRESENTATION OF BALANCE SHEET

The Process of preparation and presentation of Balance Sheet involves two steps:

- Grouping
- Marshalling

In the first step, the different items to be shown as assets and liabilities in the Balance Sheet are grouped appropriately. The second step involves marshalling of assets and liabilities. This involves a sequential arrangement of all the assets and liabilities in the Balance Sheet.

EXPLANATION AND CLARIFICATION OF CERTAIN ITEMS

For the purpose of presentation of assets in the Balance Sheet, assets are classified as under:

- Fixed Assets
- Intangible Assets
- Current Assets
- Fictitious Assets
- Wasting Assets
- Contingent Assets

Introduction to Financial Statements

A financial statement (or financial report) is a formal record of the financial activities of a business, person or other entity. For a business enterprise, all the relevant financial information, presented in a structured manner and in a form easy to understand, is termed the financial statements.

- Balance Sheet
- Income statement
- Statement of retained earnings
- Statement of cash flows

Meaning and Type of Financial Statements

A financial statement is an organised collection of data prepared in accordance with logical and consistent accounting procedures. Its function is to convey an understanding of key financial aspects of a business firm. It may show a position at a moment in time, as in the case of a Balance Sheet or may reveal a series of activities over a given duration, as in the case of an Income Statement.

Thus, the term financial statements generally refer to two basic statements: (i) the Income Statement (ii) the Balance Sheet. Furthermore, a business may also prepare (iii) a Statement of Retained Earnings (iv) a Statements of Changes in Financial Position in addition to the above two statements.

Nature of Financial Statements

According to the American Institute of Certified Public Accountants, financial statements reflect "a combination of recorded facts, accounting conventions and personal judgments and the judgments and conventions applied affect them materially".

Limitations of Financial Statements

The objectives of financial statements are subject to certain limitations as given below:

- Financial Statements are essentially interim reports
- Accounting concepts and conventions
- Influence of personal judgment
- Disclose only monetary facts

PREPARATION OF COMPANY FINANCIAL STATEMENTS

Financial statements mainly comprise of two statements, i.e. the Balance Sheet and the income statement or Profit & Loss Account. They are usually prepared at the end of the accounting period; hence, they are also known as financial accounts of the company. In case of companies, the financial accounts have been termed as annual accounts and Balance Sheet. Section 210 of the Companies Act governs the preparation of the financial accounts of a company.

PROFIT & LOSS ACCOUNT

The requirements of Profit & Loss Account can be categorised into two parts:

- General Requirements
- Special Requirements as per Schedule VI, Part II

BALANCE SHEET REQUIREMENTS

According to Section 210 of the Companies Act, it is mandatory for a company to prepare a Balance Sheet at the end of each trading period. Section 211 requires the Balance Sheet to be set up in the prescribed form. This provision is not applicable to banking, insurance, electricity and other companies governed by special Acts.

2.9 Self-Assessment Test

Broad Questions

1. What are Final Accounts? What purpose do they serve?
2. Explain the term financial statement and explain its types.
3. Differentiate between:
   a. Trading A/c and Profit & Loss A/c
   b. Trial Balance and Balance Sheet

Short Notes:

a. Limitations of Balance Sheet
b. Marshalling
c. Grouping
d. Profit & Loss A/c
e. Balance Sheet
f. Trading Account
g. Trial Balance

2.10 Further Reading

1. Modern Accountancy, Hanif & Mukherjee, Law Point, 2006
2. Financial Accounting, S. K. Paul, New central Book Agency (P) Ltd, 2003
3. Fundamentals of Accounting, S. K. Paul, New central Book Agency (P) Ltd, 2003
4. Advanced Accountancy, Hrishikesh Chakraborty, Oxford University Press, 2002
5. Accountancy, Shukla & Grewal, S Chand & Company Ltd, 1997

Assignment

From the following figurers extracted from the books of Shri Govind, prepare a Trading and Profit & Loss Account for the year ended 31st March, 1999 and a Balance Sheet as on that date, after making the necessary adjustments.

Particulars	**Amount (Rs.)**		**Particulars**	**Amount (Rs.)**
Shri Govind's Capital	2,28,800		Stock 1.4.1999	38,500
Shir Govind's Drawings	13,200		Wages	35,200
Plant & Machinery	99,000		Sundry Creditors	44,000
Freehold Property	66,000		Postage and Telegrams	1,540
Purchases	1,10,000		Insurance	1,760
Returns Outwards	1,100		Gas and Fuel	2,970
Salaries	13,200		Bad Debts	660
Office Expenses	2,750		Office Rent	2,860
Office Furniture	5,500		Freight	9,900
Discounts A/c (Dr.)	1,320		Loose Tools	2,200
Sundry Debtors	29,260		Factory Lighting	1,100
Loan to Shri Krishna @ 10% p.a. – balance as on 1.4.1999	44,000		Provision of D/D	880
Cash at Bank	29,260		Interest on loan to Shri Krishna	1,100
Bills Payable	5,500		Cash in Hand	2,640
			Sales	2,31,440

Adjustments:

1. Stock on 31st March, 1999 was valued at Rs. 72,600.
2. A new machine was installed during the year, costing Rs.15,400, but it was not recorded in the books as no payment was made for it. Wages Rs.1,100 paid for its erection have been debited to wages account.
3. Depreciate:

   Plant and Machinery by 33.3%

   Furniture by 10%

   Freehold Property by 5%
4. Loose tools were valued at Rs.1,760 on 31.03.1999.
5. Of the Sundry Debtors, Rs.600 are bad and should be written off.
6. Maintain a provision of 5% on Sundry Debtors for doubtful debts.
7. The manager is entitled to a commission of 10% of the net profits after charging such commission.

[Ans.: Gross Profit: Rs.1,08,570, Net Profit: Rs.40,800, Balance Sheet total: Rs.3,25,380]

Unit 3 Inventory Valuation Method and Depreciation

Learning Outcome

After reading this unit, you will be able to:

- Identify components which are to be included in inventory
- Explain the concepts of inventory costing methods, specific identification, FIFO, LIFO and weighted-average techniques
- Utilise Inventory Valuation System
- Put into practise gross- profit and retail methods of inventory estimation
- Discuss inventory management and monitoring methods, including the inventory turnover ratio
- Analyse the impact of inventory errors
- Enlist depreciation methods

Time Required to Complete the unit

1. 1st Reading: It will need 3 Hrs for reading a unit
2. 2nd Reading with understanding: It will need 4 Hrs for reading and understanding a unit
3. Self Assessment: It will need 3 Hrs for reading and understanding a unit
4. Assignment: It will need 2 Hrs for completing an assignment
5. Revision and Further Reading: It is a continuous process

Content Map

3.1 Introduction

3.2 Inventory Costing Method

3.1 Introduction

The previous unit discussed the preparation of final accounts and rules and provision relating to preparation of financial statement of companies. This unit deals with the most important component of any business unit namely Inventory. Inventory means Stock. This may be stock of raw-material, work-in-progress or finished goods. The important topics discussed in this unit are Inventory management and Inventory valuation. Inventory valuation permits a firm to provide a financial value for items that make up their inventory. Inventories are usually the largest current asset of a business and proper measurement of them is essential to ensure accurate financial statements. If inventory is not ascertained properly, expenses and revenues will not match and this might mislead the company to take wrong decisions in business.

Beside this the concept of depreciation and its methods are also discussed further in this unit.

3.2 Inventory Costing Method

INVENTORY AND ITS IMPORTANCE TO INCOME MEASUREMENT

Even a casual observer of the stock markets will understand that stock values often fluctuate significantly on information about a company's earnings. The reason is that inventory measurement bears directly on the determination of income.

Beginning Inventory + Net Purchase → Goods Available for sale → Ending Inventory + COGS

Notice that the goods available for sale are "allocated" to ending inventory and cost of goods sold. In the graphic representation, the units of inventory appear as physical units. But, in a company's accounting records, this flow must be translated into units of money. After all, the Balance Sheet expresses inventory in money, not units. And cost of goods sold on the income statement is also expressed in money.

This means that allocating Re.1 less of the total cost of goods available for sale into ending inventory will necessarily result in placing Re.1 more into cost of goods sold (and vice versa). Further, as cost of goods sold increases or decreases, there is a converse effect on gross profit. Sales minus cost of goods sold equals gross profit. A critical factor in determining income is the allocation of the cost of goods available for sale between ending inventory and cost of goods sold.

	Study Notes

	Assessment
1. Define the term "Inventory"	

	Discussion
1. Discuss Inventory costing	

3.3 Determining the cost of ending inventory

Closing stock or ending inventory is a business's remaining stock at the end of an accounting period. It includes finished products, raw materials or work in progress. It is deducted from the period's costs in the Balance Sheets.

In order to delve deeper into determination of cost of ending inventory, let us begin by considering a general rule: Inventory should include all costs that are "ordinary and necessary" to put the goods "in place" and "in condition" for their resale.

This means that inventory cost would include the invoice price, freight-in and similar items relating to the general rule. Conversely, carrying costs like interest charges (if money was borrowed to buy the inventory), storage costs and insurance on goods held awaiting sale would not be included in inventory accounts; instead, those costs would be expensed as incurred. Similarly, the freight-out and sales commissions will be included in the sale price and will not be a part of the inventory. Closing stock = Opening stock + Purchases + Direct Expenses - Sales

	Study Notes

	Assessment
1. Explain the term closing stock	

	Discussion
1. Discuss the determination of cost of closing stock.	

3.4 Costing Methods

Once the unit cost of inventory is determined via the preceding rules of logic, specific costing methods must be adopted. In other words, each unit of inventory will not have the exact same cost and an assumption must be implemented to maintain a systematic approach to assigning costs to units on hand (and to units sold).

To consolidate this point, consider a simple example: Mueller Hardware has a storage barrel full of nails. The barrel was restocked three times with 100 pounds of nails added at each restocking. The first batch cost Mueller Rs.100, the second batch cost Rs.110 and the third batch cost Rs.120. Further, the barrel was never allowed to empty completely and new nails were just dumped on top of the remaining pile at each restocking. Therefore, it is hard to say exactly which nails are "physically" still in the barrel. One can easily surmise that some of the nails are probably from the first purchase, some from the second purchase and some from the final purchase. Furthermore, they all look about the same. At the end of the accounting period, Mueller weighs the barrel and decides that 140 pounds of nails are on hand (from the 300 pounds available). The accounting question you must consider is: what is the cost of the ending inventory? Do not consider it as an insignificant question, as it will have a direct bearing on the calculation of income. To deal with this very common accounting question, a company must adopt an inventory costing method and that method must be applied consistently from year to year. The methods from which to choose are varied, generally consisting of one of the following:

- First-in first-out (FIFO)
- Last-in first-out (LIFO)
- Weighted average

Each of these methods entails certain cost-flow assumptions. Importantly, the assumptions bear no relation to the physical flow of goods; they are merely used to assign costs to inventory units. (Note: FIFO and LIFO are pronounced with a long "i" and long "o" vowel sound- 'feefo' and 'leefo'). Another method that will be discussed in a while is the specific identification method. As its name suggests, it does not depend on a cost flow assumption.

3.4.1 FIRST-IN FIRST-OUT CALCULATIONS

With first-in first-out, the oldest cost (i.e. the first in) is matched against revenue and assigned to cost of goods sold. Conversely, the most recent purchases are assigned to units in ending inventory. For Mueller's nails, the FIFO calculations would look like this.

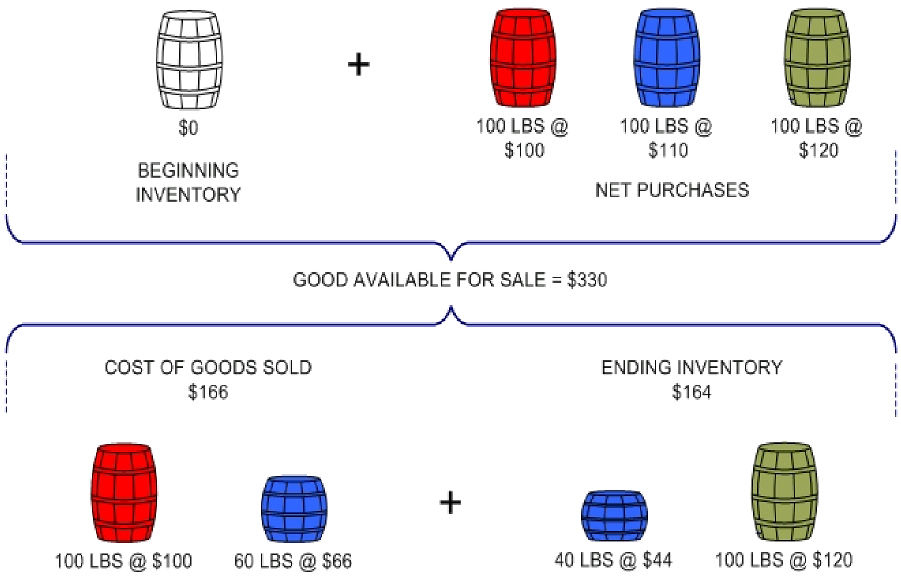

Fig. 3.1: Mueller's nails FIFO

FIFO: When FIFO is used, ending inventory and cost of goods sold calculations are as follows, producing the financial statements on the right side:

Beginning inventory	+	Net purchases (Rs. 232,000 total)
4,000 X Rs.12 = Rs. 48,000		6,000 X Rs16 = Rs.96,000
		8,000 X Rs17 = Rs.136,000

=

Cost of goods available for sale (Rs.280,000 total)

4,000 X Rs.12 = Rs.48,000

6,000 X Rs.16 = Rs.96,000

8,000 X Rs.17 = Rs.136,000

=

Ending inventory (Rs85,000)	+	Cost of goods sold (Rs.195,000 total)
5,000 X Rs.17 = Rs.85,000		4,000 X Rs.12 = Rs.48,000
		6,000 X Rs.16 = Rs.96,000
		3,000 X Rs.17 = Rs.51,000

3.4.2 Last-In First-Out Calculations

Last-in first-out is just the reverse of FIFO. Here, recent costs are assigned to goods sold while the oldest costs remain in inventory.

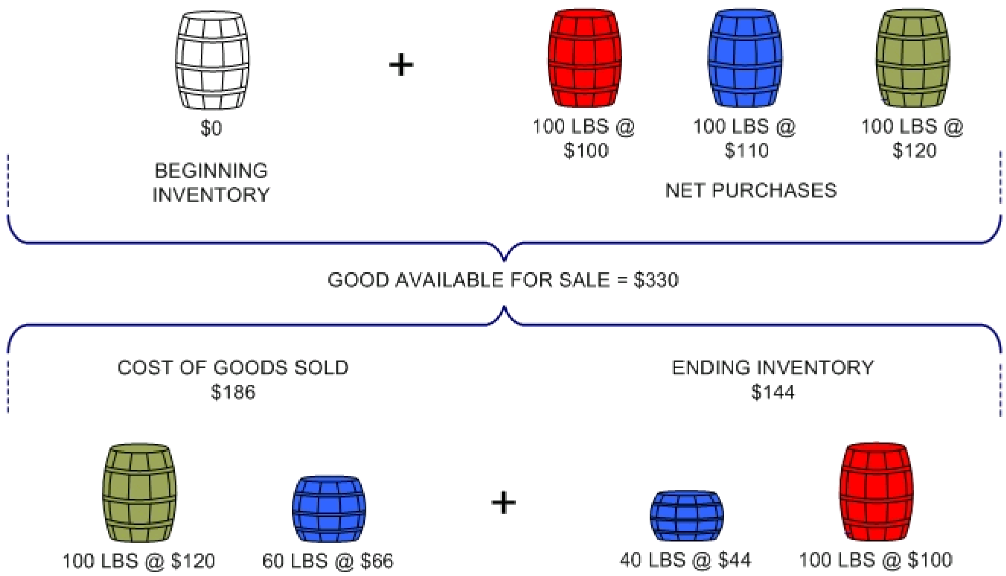

Fig. 3.2: Mueller's LIFO

LIFO: When LIFO is used, ending inventory and cost of goods sold calculations are as follows, producing the financial statements on the right side:

Beginning Inventory	+	Net purchases (Rs.232,000 total)
4,000 X Rs.12 = Rs.48,000		6,000 X Rs.16 = Rs.96,000
		8,000 X Rs.17 = Rs.136,000

=

Cost of goods available for sale (Rs.280,000 total)

4,000 X Rs.12 = Rs.48,000

6,000 X Rs.16 = Rs.96,000

8,000 X Rs.17 = Rs.136,000

=

Ending inventory (Rs.64,000)	+	Cost of goods sold (Rs.216,000 total)
4,000 X Rs.12 = Rs.48,000		

1,000 X Rs.16 = Rs.16,000	8,000 X Rs.17 = Rs.136,000
	5,000 X Rs.16 = Rs.80,000

3.4.3 WEIGHTED AVERAGE CALCULATIONS

The weighted average method relies on average unit cost to calculate cost of units sold and ending inventory. Average cost is determined by dividing total cost of goods available for sale by total units available for sale. Mueller Hardware paid Rs.330 for 300 pounds of nails, producing an average cost of Rs.1.10 per pound (Rs.330/300). The ending inventory consisted of 140 pounds or Rs.154. The cost of goods sold was Rs.176 (160 pounds X Rs.1.10).

Weighted Average: If the company uses weighted average method, ending inventory and cost of goods sold calculations are as follows, producing the financial statements on the right side:

Cost of goods available for sale	Rs.280,000
Divided by units (4,000 + 6,000 + 8,000)	18,000
Average unit cost (note: do not round)	Rs.15.5555 per unit
Ending inventory (5,000 units @ Rs.15.5555)	Rs.77,778
Cost of goods sold (13,000 units @ Rs.15.5555)	Rs.202,222

PRELIMINARY RECAP AND COMPARISON

The preceding discussion is summarised by the following comparative illustrations. Examine each, noting how the costs of beginning inventory and purchases flow to ending inventory and cost of goods sold. While going through the drawing, most of the accountants often use one of these cost flow assumptions to keep a track of inventory costs within the accounting system. The actual physical flow of the inventory may or may not bear a resemblance to the adopted cost flow assumption.

DETAILED ILLUSTRATION

After introducing the fundamental concepts of FIFO & LIFO and weighted average, let us now scrutinize them in detail. In the following illustration, there will also be some beginning inventory carried over from the preceding year.

Assume that Mueller Chemical Company had a beginning inventory balance that consisted of 4,000 units with a cost of Rs.12 per unit. Purchases and sales are shown on the right side. The schedule suggests that Mueller should hold 5,000 units on hand at the end of the year. Assume that Mueller conducted a physical count of inventory and confirmed that 5,000 units were actually on hand.

Date	Purchases	Sales	Units on Hand
1 - Jan			4,000
5 - Mar	6,000 units @ Rs.16 each		10,000
17 - Apr		7,000 units @ Rs.22 each	3,000
7- Sep	8,000 units @ Rs.17 each		11,000
11- Nov		6,000 units @ Rs.25 each	5,000

Based on the information in the schedule, we know that Mueller will report sales of Rs.304,000. This amount is the result of selling 7,000 units at Rs.22 (Rs.154,000) and 6,000 units at Rs.25 (Rs.150,000). The Rupees amount of sales will be reported in the income statement, along with cost of goods sold and gross profit. How much is cost of goods sold and gross profit? The answer will depend on the cost flow assumption adopted by Mueller.

Study Notes

Assessment

1. Explain the following:

   a. First-In-First-Out

   b. Last-In-First-Out

   c. Weighted Average Method

Discussion

1. Discuss method of costing for Inventory. Give examples for each.

3.5 Comparing Inventory Methods

The following table reveals that the amount of gross profit and ending inventory numbers appear quite dissimilar, depending on the inventory method selected:

	FIFO (Rs.)	LIFO (Rs.)	Weighted Average (Rs.)
Sales	3,04,000	3,04,000	3,04,000
Cost of Goods Sold	1,95,000	2,16,000	2,02,222
Gross Profit	1,09,000	88,000	1,01,778
Ending Inventory	85,000	64,000	77,778

The results above are consistent with the broad rule that LIFO results in the lowest income (assuming rising prices, as was evident in the Mueller example), FIFO the highest and weighted average an amount in between. As LIFO has a tendency to suppress the profits, the most obvious question is why a firm should choose this method.

The answer sometimes falls within the precincts of income tax considerations. Lower income produces a lower tax bill; thus, companies will naturally tend to prefer the LIFO alternative. Usually, financial accounting methods do not have to conform to methods chosen for tax purposes. However, in the USA, LIFO conformity rules generally require that LIFO be used for financial reporting if it is used for tax purposes.

Accounting theorists may argue that LIFO enhances financial statement presentations because it matches recently incurred costs with the recently generated revenues. Others give more importance to FIFO because recent costs are reported in inventory on the Balance Sheet. Irrespective of the method you opt for, the inventory method in use must essentially be clearly depicted in the financial statements and related notes. Companies that use LIFO will frequently enlarge their reports with supplementary data about what inventory would be if FIFO were instead used. While selecting any method, it should be borne in mind that the method should be used consistently and should not be changed. This does not mean that changes cannot occur; however, changes should only be made if financial accounting is improved.

SPECIFIC IDENTIFICATION

As noted earlier, another inventory method is specific identification. This method requires a business to identify each unit of merchandise with the unit's cost and retain that identification until the inventory is sold. Once a specific inventory item is sold, the cost of the unit is assigned to cost of goods sold. Specific identification requires tedious record-keeping and is typically used only for inventories of uniquely identifiable goods that have a high per-unit cost (e.g., automobiles, antique jewelry and so forth).

	Study Notes

	Assessment
1. What is the difference between LIFO and FIFO.	

Discussion

1. Visit an industry in your vicinity and study the inventory method followed by them.

3.6 Perpetual Inventory Systems

Perpetual inventory system may be defined as a method of recording stores balances after every receipt and issue to facilitate regular checking and to obviate closing down for stocktaking. So perpetual inventory system implies continuous maintenance of stock records and in its broad sense it covers both continuous stock taking as well as up to date recording of stores books. The balance of the same item of store in bin card should correspond with that shown in the materials or store ledger card and a frequent checking of these two records should be made and compared with the actual or physical quantity of materials in stock.

3.6.1 Perpetual FIFO

The Inventory account is continually changing in this system. When retailer purchases goods, the Inventory a/c of the retailer is debited for the cost; when the retailer sells goods to its customers, the same account is credited and its Cost of Goods Sold account is debited for the cost of the goods sold. Rather than staying quiescent as it does with the periodic method, the Inventory account balance is constantly updated.

The following transactions are recorded in this system when goods are sold:

- The sales amount is debited to Accounts Receivable or Cash and is credited to Sales.
- The cost of the goods sold is debited to Cost of Goods Sold and is credited to Inventory.

With perpetual FIFO, the first (or oldest) costs are the first to be moved from the Inventory account and debited to the Cost of Goods Sold account. The ultimate outcome under perpetual FIFO is the same as under periodic FIFO. In other words, the first costs are the same whether you move the cost out of inventory with each sale (perpetual) or whether you wait until the year is over (periodic).

3.6.2 Perpetual LIFO

Under the perpetual system, the Inventory account is continually (perpetually) changing. When a retailer purchases merchandise, the retailer debits its Inventory account for the cost of the merchandise. When the retailer sells the merchandise to its customers, the retailer credits its Inventory account for the cost of the goods that were sold and debits its Cost of Goods Sold account for their cost. Rather than staying dormant, as it does with the periodic method, the Inventory account balance is continuously updated.

Under the perpetual system, two transactions are recorded at the time that the merchandise is sold: (1) the sales amount is debited to Accounts Receivable or Cash and is credited to Sales (2) the cost of the merchandise sold is debited to Cost of Goods Sold and is credited to Inventory. (Note: Under the periodic system, the second entry is not made. Hence the distinction.)

With perpetual LIFO, the last costs available at the time of the sale are the first to be removed from the Inventory account and debited to the Cost of Goods Sold account. Since this is the perpetual system, we cannot wait until the end of the year to determine the last cost- an entry must be recorded at the time of the sale in order to reduce the Inventory account and to increase the Cost of Goods Sold account.

If costs continue to rise throughout the entire year, perpetual LIFO will yield a lower cost of goods sold and a higher net income than periodic LIFO. Generally, this means that periodic LIFO will result in less income taxes than perpetual LIFO.

This also implies that if an enterprise wishes to minimize the amount paid in income taxes during periods of inflation, LIFO should be discussed with the tax adviser.

Study Notes

Assessment

1. What is perpetual Inventory system.

2 What are the transactions recorded in this perpetual FIFO system

Discussion

1. Discuss difference between perpetual LIFO and FIFO.

3.7 Lower of Cost or Market Adjustments

The accountants are advised to present the financial data objectively so that it is free from bias. However, accountants tend to do otherwise and use conservatism. Conservatism dictates that accountants avoid overstatement of assets and income. Conversely, liabilities would tend to be presented at higher amounts in the face of uncertainty. This is not a hard and fast rule, just a general principle of measurement.

In the case of inventory, a company may find itself holding inventory with an uncertain future; this means the company does not know if or when that inventory will sell. Obsolescence, over supply, defects, major price declines and similar problems can contribute to uncertainty regarding the "realisation" (conversion to cash) for inventory items. Therefore, accountants evaluate inventory and employ "lower of cost or market" considerations. This simply means that if inventory is carried on the accounting records at greater than its market value, a write-down from the recorded cost to the lower market value would be made. In essence, the inventory account would be credited and a Loss for Decline in Market Value would be the offsetting debit. This debit would be reported in the income statement as a charge against (reduction in) income.

Measuring Market Value: Market values are very subjective. In the case of inventory, applicable accounting rules define "market" as the replacement cost (not sales price) of the goods. In other words, what would it cost for the company to acquire or reproduce the inventory?

However, the lower-of-cost-or-market rule can become slightly more convoluted because the accounting rules further specify that market cannot exceed a ceiling amount known as "net realisable value" (NRV = selling price minus completion and disposal costs).

The reason is this: occasionally, "replacement cost" for an inventory item could be very high (e.g. a supply of slide rules at an office supply store) even though there is virtually no market for the item and it is unlikely to produce much net value when it is sold. Therefore, "market" for purposes of the lower of cost or market test should not exceed the net realisable value. Additionally, the rules stipulate that "market" should not be less than a floor amount, which is the net realizable value less a normal profit margin.

What we have then is the following decision process:

Step 1: Determine market-replacement cost, not to exceed the ceiling nor to be less than the floor.

Step 2: Report inventory at the lower of its cost or market (as determined in step 1).

To illustrate, consider the following four different inventory items and note that the "cost" of Item A,B,C,D is $1000,$2500,$3000,$4000 ,is shaded in black and the appropriate "market value" is shaded in Grey (step 1). The reported value is in the final row and corresponds to the lower of cost or market:

Table 3.1: Value to Report

Particulars	**Item A (Rs.)**	**Item B (Rs.)**	**Item C (Rs.)**	**Item D (Rs.)**
Cost	1000	2500	3000	4000
v/s Market:				
Replacement Cost	1200	2400	3000	2000
Net Realizable Value (ceiling)	1400	2800	2800	3000
NRV less normal profit margin	1100	2200	2200	2500
Value to report	1000	2400	2800	2500

Application of the Lower-of-Cost-or-Market Rule: Despite the apparent focus on detail, it is noteworthy that the lower of cost or market adjustments can be made for each item in inventory or for the aggregate of the entire inventory. In the latter case, the good offsets the bad and a write-down is only needed if the overall market is less than the overall cost. In any event, once a write-down is deemed necessary, the loss should be recognised in income and inventory should be reduced. Once reduced, the Inventory account becomes the new basis for valuation and reporting purposes going forward. Write-ups of previous write-downs (e.g. if slide rules were to once again become hot selling items and experience a recovery in value) would not be permitted under Generally Accepted Accounting Principles (GAAP).

	Study Notes

	Assessment
1. Determine measurement of market value. 2. What is "Net realizable value"	

	Discussion
1. Discuss the application of the Lower-of-Cost-or-Market Rule.	

3.8 Inventory Estimation Techniques

Whether a company uses a periodic or perpetual inventory system, a physical count of goods on hand should occur occasionally. The quantities determined via the physical count are presumed to be correct and any differences between the physical count and amounts reflected in the accounting records should be matched with an adjustment to the accounting records. Sometimes, however, a physical count may not be possible or is not cost effective. In such cases, estimation methods are employed. Some estimation methods are discussed below.

3.8.1 Gross Profit Method

One kind of estimation technique is the gross profit method. This method can be used to estimate inventory on hand for purposes of preparing monthly or quarterly financial statements and certainly would come into play if a fire or other catastrophe destroyed the inventory. Such estimates are often used by insurance companies to establish the amount that has been lost by an insured party. Very simply, a company's historical normal gross profit rate (i.e. gross profit as a percentage of sales) would be used to estimate the amount of gross profit and cost of sales. Once these data are recognized, it is relatively simple to project the lost inventory.

For example, assume that Tiki's inventory was destroyed by fire. Sales for the year prior to the date of the fire were Rs.1,000,000 and Tiki usually sells goods at a 40% gross profit rate. Therefore, Tiki can readily estimate that cost of goods sold was Rs 600,000. Tiki's beginning of year inventory was Rs. 500,000 and purchases worth Rs.800,000 had occurred prior to the date of the fire. The inventory destroyed by fire can be estimated via the gross profit method, as shown.

Table 3.2: Gross Profit Method

Sr. No.	A	B	C	D	E	F	G
	Sales	100%		10,00,000		Step: 2 Solve for cost of goods sold	
	Cost of Goods Sold	60%		6,00,000			
	Gross Profit	40%		4,00,000			
	Step: 1 Determines relative percentage						
	Beginning Inventory			5,00,000			
	Purchases	Step: 3 Fill in Known Values		8,00,000			
	Goods Available			13,00,000			
	Less: Cost of Goods Sold			6,00,000			
	Ending inventory presumed lost to fire			7,00,000			

3.8.2 Retail Method

A method that is employed extensively by merchandising firms to value or estimate ending inventory is the retail method. This method would work only where a category of inventory sold at retail has a consistent mark-up. The cost-to-retail percentage is multiplied times ending inventory at retail. Ending inventory at retail can be determined by a physical count of goods on hand, at their retail value. Alternatively, sales might be subtracted from goods available for sale at retail. This option is shown in the following example.

To illustrate, Crock Buster, a specialty cookware store, sells pots that cost Rs. 7.50 for Rs.10 -- yielding a cost to retail percentage of 75%. The beginning inventory totaled Rs.200,000 (at cost), purchases were Rs.300,000 (at cost) and sales totaled Rs.460,000 (at retail). The calculations suggest an ending inventory that has a cost of Rs.155,000. In reviewing these calculations, note that the only "givens" are circled. These three data points are manipulated by the cost to retail percentage to solve for several unknowns. Be careful to note that the percentage factor is divided within the grey arrows and multiplied within the black.

Table 3.3: Retail Method

A	B	C	D
	At cost (75% of Retail)		At Retail
Beginning Inventory	Rs.2,00,000	÷0.75	Rs. 2,66,667
Purchases	3,00,000	÷0.75	4,00,000
Goods available	Rs. 5,00,000		Rs.666,667
Sales	3,45,000	0.75 x	4,60,000
Ending Inventory	Rs.1,55,000		Rs.2,06,667

Study Notes

Assessment

1. What are the methods of Inventory Estimation.

Discussion

1. Visit any of the industries and study the Inventory estimation technique used by them and determine why.

3.9 Inventory Management

The best run companies realise the importance of minimising their investment in inventory. Inventory is costly and involves the potential for loss and spoilage. In the alternative, being out of stock may result in lost customers, so a precarious balance must be maintained. Careful attention must be paid to the inventory levels. One ratio that is often used to monitor inventory is the ‘Inventory Turnover Ratio’. This ratio shows the number of times that a firm's inventory balance was turned ("sold") during a year. It is calculated by dividing cost of sales by the average inventory level:

Inventory Turnover Ratio = Cost of Goods Sold/Average Inventory

If a company's average inventory was Rs.1,000,000 and the annual cost of goods sold was Rs.8,000,000, you would deduce that inventory turned over 8 times (approximately once every 45 days). This could be good or bad depending on the particular business; if the company was a baker it would be very bad news, but a lumber yard might view this as good. So, general assessments are not in order. It is more significant to monitor the turnover against other companies in the same line of business and against prior years' results for the same company. A declining turnover rate might indicate poor management, slow moving goods or a worsening economy. In making such comparisons and evaluations, you should now be clever enough to recognize that the choice of inventory method affects the reported amounts for cost of goods sold and average inventory. As a result, the repercussions of the inventory method in use must be considered in any analysis of inventory turnover ratios.

INVENTORY ERRORS

In the process of maintaining inventory records and the physical count of goods on hand, errors may occur. It is quite easy to overlook goods on hand, count twice or simply make mathematical mistakes. Therefore, it is vital that accountants and business owners fully understand the effects of inventory errors and grasp the need to be careful to get these numbers as correct as possible.

A general rule is that overstatements of ending inventory cause overstatements of income, while understatements of ending inventory cause understatements of income.

	Study Notes

	Assessment
1. What is Inventory turnover ratio. Explain its purpose 2. What are the causes of errors in Inventory Management.	

	Discussion
Discuss Inventory Management and its importance.	

3.10 Meaning of Depreciation

Depreciation refers to gradual decrease or loss in the value of an asset due to usage, passage of time and normal wear and tear. This gradual fall in the value of the asset is of permanent nature, which cannot be made good by normal repair and maintenance.

Accounting Standard (AS-6) issued by Institute of Chartered Accountants of India defines depreciation as follows:

"Depreciation is a measure of wearing out consumption or other loss of value of depreciable asset arising from use, effluxion of time or obsolescence through technology and market changes. Depreciation is allocated so as to charge a fair portion of the depreciable amount in each accounting period during the expected useful life of the assets."

Study Notes

Assessment

1. Define Depreciation.

Discussion

1. Explain the concept of depreciation considering the definition under Accounting Standard (AS-6) issued by Institute of Chartered Accountants of India

3.11 Characteristics of Depreciation

The important characteristics of depreciation are listed below:

- Depreciation is charged on fixed and tangible assets only.
- Depreciation refers to a permanent / gradual and continuous decrease in the utility value of a fixed asset and it continues till the end of the useful life of the asset.
- Depreciation is a charge against profit for a particular accounting period.
- Depreciation is always computed in a systematic and rational manner since it is not a sudden loss.
- Depreciation is a process of allocation of expired cost and not of valuation of fixed assets.
- Depreciation represents only an estimate and not the exact amount.
- Depreciation may be physical and functional.
- Total depreciation cannot exceed the cost of the depreciable asset.
- It is non-cash charge and hence does not involve outflow of cash.
- The basis of charging depreciation is economic life of the asset and the cost thereof. Market value has no relevance for calculating depreciation.
- Depreciation is different and distinct from Amortisation, Depletion Obsolescence, Dilapidation and Fluctuation.

Study Notes

	Assessment
1. List any five characteristics of Depreciation.	

	Discussion
1. Discuss the nature of depreciation in any business organisation.	

3.12 Causes of Depreciation

There is no solitary factor that can be considered accountable for depreciation; there is a host of factors contributing to depreciation.

- **Usage**: Normal usage of any tangible fixed asset such as building, plant and machinery, furniture and fixtures or motor vehicle bring physical deterioration is caused by friction, movement, strain, vibration or even by weathering and chemical reaction.
- **Passage of time**: There are certain assets such as patents, copyrights and leasehold assets, which decrease in value with the effluxion of time. These assets generate revenue for a stipulated period of time for which these are acquired or paid for. After that specific tenure, these assets lose their value. Hence, such assets are written off during their stipulated life.
- **Obsolescence**: When an existing asset in use becomes economically unviable due to innovation or technological changes, it is said to have become obsolete and hence has to be abandoned. Obsolescence is also caused by change in fashion, government policy, customer's demand / taste, which render the asset useless and liable to be discarded.
- **Exhaustion or depletion**: There are some fixed assets, which are wasting in nature and which lose their usefulness due to the extraction of raw materials from them, i.e. they get fully exhausted. They are termed wasting assets e.g., mines, quarries, oil well etc. Evidently, natural resources come under this category.
- **Inadequacy**: When any asset fails to cope with the increasing volume of business activity and is considered inadequate to meet the present requirement, such assets lose their usefulness and hence require replacement. However, these assets may lose usefulness for the existing company and may turn out to be useful for other business having relatively lower volume of business activity. Hence, these assets should not be scrapped

but sold to other business concern. Again, a firm has to use its plant capacity to the optimum level. If production level does not permit to operate at optimum capacity, the plant or machinery or any other asset has to be abandoned for replacement.

	Study Notes

	Assessment
1. What are the reasons of depreciating an asset?	

	Discussion
1. Discuss the causes of depreciation and classify them as Internal causes and external causes.	

3.13 Objectives of Providing Depreciation

1. **To ascertain true value of assets and financial position:** The value of assets diminishes over a period of time on account of various factors. In order to present a true state of affairs of the business, the assets should be shown in the Balance Sheet, at their true and fair values. If the depreciation is not provided, the asset will appear in the Balance Sheet at the original value. So, in order to show the true financial position of a business, it is imperative to charge depreciation on the assets. If depreciation is not provided, the

value of assets will be shown at inflated value in the Balance Sheet. By this means, fixed assets will not represent true and correct state of affairs of business.

2. **To make provision for replacement of worn out assets**: All the fixed assets used in the business require replacement after the expiry of their useful life. The need for replacement can be due to many reasons like change in technology, taste, fashion or demand, which makes a particular asset useless causing permanent loss in its value. To provide requisite amount for replacement of this depreciating asset, annual depreciation is charged to Profit & Loss Account. The amount so provided may be retained in business by ploughing back or invested in outside securities to make the funds available for replacement purposes. Practically, the provisions so provided for depreciation help to recoup the expired cost of the assets used, depleted or exhausted.
3. **To calculate correct amount of profits or loss**: Matching principles states that the expenses or costs incurred to earn revenue must be charged to Profit & Loss Account for the purpose of correct computation of profit. When an asset is purchased, it is nothing more than a payment in advance for the use of asset. Depreciation is the cost of using a fixed asset. To determine true and correct amount of profit or loss, depreciation must be treated as revenue expenses and debited to Profit & Loss Account. Like any other operating expenses, if depreciation is not provided, the profits will be inflated and losses understated.
4. **To compute cost of production**: Depreciation not only facilitates financial accounting in computation of profits but it is also an important element of cost determination process. In the absence of depreciation, it is very difficult to ascertain the actual cost of production, process, batch, contract and order of a product. Although the method of charging depreciation is entirely different, without depreciation, no costing system is complete.
5. **To comply with legal provisions**: Section 205 of the Companies Act 1956 provides that depreciation on fixed assets must be charged and necessary provision should be made before the company distributes dividends to its shareholders. Hence, depreciation is charged to comply with the provisions of the Companies Act.
6. **To avail of tax benefits**: The Profit & Loss Account will show more profits if depreciation is not charged on assets. In this case, the business needs to pay more income tax to the government. Depreciation charges on assets save the amount of tax equivalent to tax rate. Since it is shown as expense in the Profit & Loss Account, it shrinks the amount of profit.

	Study Notes

	Assessment
1. What is the purpose of Depreciation in organisation.	

	Discussion
1. Discuss the need to provide for depreciation of assets while preparing the balance sheet	

3.14 Computation of Depreciation

Computation of depreciation is not an easy process. There are several factors that affect the calculation of depreciation. Some of the factors are given below.

1. **Cost of the depreciable asset:** Cost of the asset plays a decisive role in determining the amount of depreciation. Cost means historical cost of the assets. This notion is also supported by cost concept, which states that the fixed assets should be recorded at cost to the firm. Cost, for this purpose, includes price (less discount if any), freight or handling charges, legal charges, installation charges or transfer charges, sales tax, insurance in transit etc that help in acquisition and putting the asset in a working condition. When a second-hand asset is purchased, the initial cost of putting the asset in working position

such as expenditure for new parts, repairs/renovation etc are added to the cost of assets.

However, interest on loan taken to purchase an asset will not form part of cost of asset. Interest paid on a loan during construction period will be treated part of cost of an asset.

2. **Useful life of the depreciable asset:** According to AS-6 (7), the useful life of a depreciable asset is shorter than its physical life and is:

    a. Pre-determined by legal or contractual limits, such as expiry dates of related leases

    b. Directly governed by extraction or consumption

    c. Dependent on the extent of use and physical deterioration on account of wear and tear, which again depends upon operational factors such as number of the shifts when the asset is to be used, repair and maintenance policy of the enterprise etc.

    d. Reduced by obsolescence arising from such factors as:

        - Technological changes
        - Improvement in production method
        - Change in market demand for the product or service output of the asset
        - Legal or other restrictions

Further, the determination of useful life of a depreciable asset is a matter of estimation and is usually based on various factors including experience with similar types of assets. Such estimation is more difficult for an asset using new technology or used in the production of a new product in provision of a new service but is nevertheless required on some reasonable basis.

Hence it is quite clear that the useful or economic life of a depreciable asset depends upon intensity of use, repairs and maintenance policy and other factors such as technological, legal or demand factors causing obsolescence.

3. **Residual value:** It describes the future value of a good in terms of percentage of depreciation of its initial value. It is the estimated price at which a fixed asset is expected to be sold as a scrap at the end of its useful life, i.e. when the asset is discarded. However, the expenses incurred on sale or disposal must be deducted from the sale proceeds of discarded asset. According to AS-6, determination of residual value of an asset is normally a difficult matter. If such value is considered as insignificant, it is normally regarded as nil. On the contrary, if the residual value is likely to be significant, it is estimated at the time of acquisition/installation or at the time of subsequent

revaluation of the asset. In accounting, residual value is another name for salvage value, the remaining value of an asset after it has been fully depreciated. The residual value derives its calculation from a base price, calculated after depreciation. One of the basis of determining the residual value would be the realisable value of similar assets which have reached the end of their useful lives and have operated under the conditions similar to those in which asset will be used.

Thus, the amount of depreciation is the function of three variables – the cost of asset, useful or economic life of the depreciating asset and the residual value thereof.

Study Notes

Assessment

1. What are the factors to be kept in mind while calculating Depreciation.

2. How to determine useful life of depreciable asset.

3. What do you mean by "Cost of Depreciable asset"

4. How is Residual value arrived at?

Discussion

1. Suppose a machine is bought for Rs.40,000 and its life is estimated at 20,000 hours. Calculate the hourly rate of depreciation. If in a year machine is used for 1,000 hours, what will be the depreciation.

Answer: Hourly rate of depreciation is Rs. 2 and if machine is used for 1000 hours the depreciation is Rs. 2000.

3.15 Methods of Charging Depreciation

Fixed assets differ from each other in their nature so widely that the same depreciation methods cannot be applied to each. The following methods have therefore been evolved for depreciating various assets:

1. Fixed instalment or Straight line or Original cost method.
2. Diminishing Balance Method or Written down value method or Reducing Instalment method.
3. Annuity Method.
4. Depreciation fund method or Sinking fund amortization fund method.
5. Insurance policy method.
6. Revaluation method.

1. **Fixed instalment method**: Fixed instalment method is also known as straight line method or original cost method. Under this method the expected life of the asset or the period during which a particular asset will render service is the calculated. The cost of the asset less scrap value, if any, at the end f its expected life is divided by the number of years of its expected life and each year a fixed amount is charged in accounts as depreciation. The amount chargeable in respect of depreciation under this method remains constant from year to year. This method is also known as straight line method because if a graph of the amounts of annual depreciation is drawn, it would be a straight line.

The following formula or equation is used to calculate depreciation under this method:

Annual Depreciation = [(Cost of Assets - Scrap Value)/Estimated Life of Machinery]

The journal entries that will have to be made under this method are very simple. The journal entries will be as under:

. Depreciation account

To Asset account

(Being the depreciation of the asset)

. Profit and loss account

To Depreciation account

(Being the amount of depreciation charged to Profit and Loss account)

These entries will be passed at the end of each year so long as the asset lasts. In the last year, the scrap will be sold and with the amount that realised by the sale the following entry will be passed:

. Cash account

To Asset account

(Being the sale price of scrap realised.)

Advantages:

1. Fixed instalment method of depreciation is simple and easy to work out
2. The book value of the asset can be reduced to zero.

Disadvantages:

1. This method, in spite of its being simplest is not very popular because of the fact that whereas each year's depreciation charge is equal, the charge for repairs and renewals

goes on increasing as the asset becomes older. The result is that the profit and loss account has to bear a light burden in the initial years of the asset but later on this burden becomes heavier.

2. Interest on money is locked up in the asset is not taken into account as is done in some other methods.
3. No provision for the replacement of the asset is made.
4. Difficulty is faced in calculation of depreciation on additions made during the year.

On account of the above mentioned advantages and disadvantages of fixed instalment method, it is generally applied in case of those assets which have small value or which do not require many repairs and renewals for example copyright, patents, short leases etc.

Example

On 1st January 1991 X purchased a machinery for Rs.21,000. The estimated life of the machine is 10 years. After it its breakup value will be RS. 1,000 only. Calculate the amount of annual depreciation according to fixed instalment method (straight line method or original cost method) and prepare the machinery account for the first three years.

Machinery Account

Debit Side		**Rs.**	**Credit Side**		**Rs.**
1991 Jan. 1	To Bank account	21,000	1991 Dec. 31	By Depreciation account	2,000
			1991 Dec. 31	By Balance c/d	19,000
		21,000			21,000
1992 Jan. 1	To Balance b/d	19,000	1991 Dec. 31	By Depreciation account	2,000
			1991 Dec. 31		17,000
		15,000			15,000
1993 Jan. 1	To Balance b/d	17,000	1991 Dec. 31	By Depreciation account	2,000

	1991 Dec. 31	By Balance c/d	15,000

2. Diminishing balance method : Diminishing balance method is also known as written down value method or reducing installment method. Under this method the asset is depreciated at fixed percentage calculated on the debit balance of the asset which is diminished year after year on account of depreciation.

The entries in this case will be identical to those discussed in the case of the fixed installment method. Only the amount will be differently calculated.

Advantages of Diminishing Balance Method:

1. The strongest point in favour of this method is that under it the total burden imposed on profit and loss account due to depreciation and repairs remains more or less equal year after year since the amount after depreciation goes on diminishing with the passage of time whereas the amount of repairs goes on increasing an asset grow older.
2. Separate calculations are unnecessary for additions and extensions, though in the first year some complications usually arise on account of the fact that additions are generally made in the middle of the year.

Disadvantages of Diminishing Balance method:

1. This method ignores the question of interest on capital invested in the asset and the replacement of the asset.
2. This method cannot reduce the book value of an asset to zero if it is desired.
3. Very high rate of depreciation would have to be adopted otherwise it will take a very long time to write an asset down to its residual value

This method is most suited to plant and machinery where additions and extensions take place so often and where the question of repairs is also very important. Written down value method or reducing instalment method does not suit the case of lease, whose value has to be reduced to zero.

Example

On 1st January, 1994, a merchant purchased plant and machinery costing Rs.25,000. It has been decided to depreciate it at the rate if 20 percent p.a. on the diminishing valance method (written down value method). Show the plant and machinery account in the first three years.

Plant and Machinery Account

Debit Side			Credit Side		
Date		Rs.	Date		Rs.
1994 Jan. 1	To Cash	25,000	1994 Dec. 31	By Depreciation	5,000*
			"	By Balance c/d	20,000
		25,000			25,000
1995 Jan. 1	To Balance b/d	20,000	1995 Dec. 31	By Depreciation	4,000**
			"	By Balance c/d	16,000
		20,000			20,000
1996 Jan. 1	To Balance b/d	16,000	1996 Dec. 31	By Depreciation	3,200***
				By Balance c/d	12,800
		16,000			16,000

Formula or equation for the above calculation may be written as follows:

*First year: 25,000 × 20% = 5000

**Second Year: (25000 - 5000) × 20% = 4,000

***Third Year: [25000 - (5,000 + 4,000)] × 20% = 3,200

3. **Annuity method:** According to this method, the purchase of the asset concerned is considered an investment of capital, earning interest at certain rate. The cost of the asset and also interest thereon are written down annually by equal installments until the book value of the asset is reduced to nil or its bread up value at the end of its effective life. The annual charge to be made by way of depreciation is found out from annuity

tables. The annual charge for depreciation will be credited to asset account and debited to depreciation account, while the interest will be debited to asset account and credited to interest account.

Under annuity method, journal entries have to be made in respect of interest and depreciation. As regards interest, it has to be calculated on the debit balance of the asset account at the commencement of the period, at the given rate. The entry that is passed:

Asset account

.

To Interest account

(Being interest on capital sunk in asset)

With regard to depreciation the amount found out from the depreciation annuity table, the following entry is passed:

Depreciation account

.

To Asset account

(Being the depreciation of asset)

It should be remembered that the interest is charged on the diminishing balance of the asset account, the amount of interest goes on declining year after year. But the amount of depreciation remains the same during the life time of the asset.

Example

A firm purchased a 5 years' lease for Rs.40,000 on first January. It decides to write off depreciation on the annuity method. Presuming the rate of interest to be 5% per annum.

Show the lease account for the first 3 years. Calculations are to be made to the nearest dollar.

Annuity Table

Amount required to write off Re.1 by the annuity method.

Years	3%	3.5%	4%	4.5%	5%
3	0.353530	0.359634	0.360349	0.363773	0.367209
4	0.269027	0.272251	0.275490	0.278744	0.282012
5	0.218355	0.221418	0.224627	0.227792	0.230975
6	0.184598	0.187668	0.190762	0.193878	0.197017
7	0.160506	0.163544	0.166610	0.169701	0.172820
8	0.142456	0.145477	0.148528	0.151610	0.154722

Solution:

According to the annuity table given above, the annual charge for depreciation reckoning interest at 5 percent p.a. would be:

230975 × 40,000 = $9,239

Lease Account

Debit Side			Credit Side		
Date		$	Date		$
1st Year			1st Year		
Jan. 1	To Cash	40,000	Dec. 31	By Depreciation	9,239
Dec. 31	To Interest	2,000		By Balance c/d	32,761
		42,000			42,000
2nd Year			2nd Year		
Jan. 1	To Balance b/d	32,761	Dec. 31	By Depreciation	9,239
Dec. 31	To Interest	1,638		By Balance c/d	25,160
		34,399			34,399
3rd					

Year					
Jan. 1	To Balance b/d	25,160	Dec. 31	By Depreciation	9,239
Dec. 31	To Interest	1,258		By Balance c/d	17,179
		26,418			26,418
3rd Year					
Jan. 1	To Balance b/d	17,170			

Advantages:

1. This method takes interest on capital invested in the asset into account.
2. It is regarded as most exact and precise from the point of view of calculations; and is therefore most scientific.

Disadvantages:

1. The system is complicated.
2. The burden on profit and loss account goes on increasing with the passage of time whereas the amount of depreciation charged each year remains constant. The amount of interest credited goes on diminishing as years pass by, the ultimate consequence being that the net burden on profit and loss account grows heavier each year.
3. When the asset requires frequent additions and extensions, the calculation have to be changed frequently, which is very inconvenient.

This method is best suited to those assets which require considerable investment and which do not call for frequent additions e.g., long lease.

4. **Depreciation fund method :** Depreciation fund method is also known as sinking fund method or amortization fund method. Under this method, a fund know as depreciation fund or sinking fund is created. Each year the profit and loss account is debited and the fund account credited with a sum, which is so calculated that the annual sum credited to the fund account and accumulating throughout the life of the asset may be equal to the amount which would be required to replace the old asset. In order that ready funds may

be available at the time of replacement of the asset an amount equal to that credited to the fund account is invested outside the business, generally in gilt-edged securities. The asset appears in the balance sheet year after year at its original cost while depreciation fund account appears on the liability side.

The following entries are necessary to record the depreciation and replacement of an asset by this method.

(a). First year (at the end)

- (1). Debit profit and loss account and credit depreciation fund account with the amount of the annual depreciation charge.
- (2). Also debit depreciation fund investment account and credit cash account with an equal amount.

(b). In subsequent years.

- (1). Debit depreciation fund investment account and credit depreciation fund account with the amount of interest earned and reinvested.
- (2). Debit profit and loss account and credit depreciation fund account with the annual depreciation installment.
- (3). Debit depreciation fund investment account and credit cash account with an equal amount.

(c). On replacement of asset.

- (1). Debit cash account and credit depreciation fund investment account with the amount realized by the sale of investment.
- (2). Transfer any profit or loss on sale of investment to profit and loss account.
- (3). Debit the new asset purchased and credit cash account.
- (4). Debit depreciation fund account and credit the account of the old asset which has become useless.

The amount of annual depreciation to be provided for by the depreciation fund method will be ascertained from sinking fund table.

Sinking Fund Table

Annual sinking fund installment to provide $1.

Years	3%	3.5%	4%	4.5%	5%
3	0.323540	0.321934	0.320349	0.318773	0.317208
4	0.239027	0.237251	0.235490	0.233741	0.232012
5	0.188350	0.186481	0.184627	0.182792	0.180975
6	0.154598	0.152668	0.150762	0.148878	0.147017
7	0.130506	0.128544	0.126610	0.124701	0.122820
8	0.112446	0.110477	0.108528	0.106610	0.104722

Example

On 1st January, 1990 a four years lease was purchased forRs.20,000 and it is decided to make provision for the replacement of the lease by means of a depreciation fund, the investment yielding 4 percent per annum interest. Show the necessary ledger account.

Solution:

To get Re.1 at the end of 4 years at 4 percent an annual investment of RS.2,35,490 is necessary. Therefore, for Rs.20,000 an annual investment of Rs.4,709.80 i.e., 2,35,490 × 20,000 will be necessary.

Lease Account

1990			1990		
Jan.1	To Cash	20,000	Dec. 31	By Depreciation fund	20,000

Depreciation Fund Account

1990			1990		
Dec. 31	To Balance c/d	4,709.80	Dec. 31	By P & L account	4,709.80

1991			1991		
Dec. 31	To Balance c/d	9607.99	Jan. 1	By Balance c/d	4709.80
			Dec. 31	By Depreciation fund investment	188.39
			"	By P&L account	4709.80
		9607.99			9607.99
1992			1992		
Dec. 31	To Balance c/d	14702.11	Jan. 1	By Balance b/d	9607.99
			Dec. 31	By Depreciation fund investment	384.32
			"	By P & L account	4709.80
		14702.11			14702.11
1993			1993		
Dec. 31	To Lease account	20,000	Jan. 1	By Balance b/d	14702.11
			Dec. 31	By Depreciation fund investment	588.9
				By P & L	4,709.80
		20,000			20,000

Depreciation Fund Account

1990			1990		
Dec. 31	To Cash	4709.80	Dec. 31	By Balance c/d	4709.80
1991			1991		
Jan. 1	To Balance b/d	4709.80	Dec. 31	By Balance c/d	9,607.99
Dec. 31	To Depreciation fund	188.39			

Dec. 31	To Cash	4,709.80			
		9,607.99			9,607.99
1992			1992		
Jan. 1	To Balance b/d	9,607.99	Dec. 31	By Balance c/d	14,702.11
Dec. 31	To Depreciation fund	384.32			
Dec. 31	To Cash	4709.80			
1993			1993		
Jan. 1		14,702.11	Dec. 31	By Cash	20,000.00
Dec. 31		588.9			
Dec. 31		4709.80			
		20,000			20,000

Note: The cash installment at the end of the last year will not be invested because there is no point in buying the investment and selling them on the same date.

Advantages of Depreciation Fund Method Or Sinking Fund Method:

The most important advantages of this method is that it makes available a sum of money for the replacement of the asset, which has become useless. If separate provision was not made, the sum required to purchase the new asset will have to be drawn from the business which might affect the financial position of the concern adversely.

Disadvantages of the Depreciation Fund Method Or Sinking Fund Method:

1. The burden on profit and loss account goes on increasing as years pass by since the amount of depreciation every year remains same but the amount spent on repairs goes on increasing as the asset becomes old.
2. It can also be said that the work of investing money is complicated.

3. Prices of securities may fall at the time when they are to be realized as a result of which loss may have to be suffered.

This method is found suitable wherever it is desired not only to charge depreciation but also to replace the asset as happens in the case of plant and machinery and other wasting assets.

5. Insurance policy method : **Insurance policy method** is a slight modification of the depreciation fund method or sinking fund method. Under this method the amount represented by the depreciation fund, instead of being used to buy securities, is paid to an insurance company as premium. The insurance company issues a policy promising to pay a lump sum at the end of the working life of the asset for its replacement.

The advantage of insurance policy method is that risk of loss on the sale of investment and the trouble and expense of buying investment are avoided, while disadvantage lies that the interest received on the premiums paid is comparatively very low.

When insurance policy method is employed the policy account will take the place of the depreciation fund investment account and no interest will be received at the end of each year, but the total interest on the premiums will be received when the policy matures.

Every year's two entries will be made:

1. **In the beginning:**
   Depreciation insurance policy account
       To Cash account
   (Being the payment of premium on depreciation policy)
2. **At the end of the year:**
   Profit and loss account
       To Depreciation fund account
   (Being the amount of depreciation charged to profit and loss account)

When the policy will mature i.e., to say the amount of the policy will be received. The entry is:

3. Cash account
       To Depreciation insurance policy account

(Being the policy amount realized)

The depreciation insurance policy account will show some profit. This will be transferred to depreciation fund account, the entry being.

4. Depreciation insurance policy account

   To Depreciation fund account

   (Being the policy amount realized)

The asset account will have been shown throughout at its original cost. It now be written off by transfer to depreciation fund account. The entry is:

5. Depreciation fund account

   To Asset account

Example

On 1st January, 1990 a business purchases a three year lease of premises for $20,000 and it is decided to make a provision for replacement of the lease by means o an insurance policy purchased for annual premium.

Show the ledger accounts dealing with this matter.

Solution:

Leasehold Account

Dr. Side			Cr. Side		
1990			1990		
Jan. 1	To Cash	20,000	Dec. 31	By Depreciation fund	20,000

Depreciation Fund Account

Dr. Side			Cr. Side		
1990			1990		
Dec. 31	To Balance c/d	6,400	Dec. 31	By Profit and loss a/c	6,400
1991					
Dec. 31	To Balance c/d	12,800	Jan. 1	By Balance b/d	6,400
			Dec. 31	By Profit and loss a/c	6,400

		12,800			12,800
1992			1992		
Dec. 31	To Leasehold Property	20,000	Jan. 1	By Balance b/d	12,800
			Dec. 31	By Profit and loss a/c	6,400
			"	By Leasehold	800
		20,000			20,000

Leasehold Policy Account

Dr. Side			Cr. Side		
1990			1990		
Dec. 31	To Cash	6,400	Dec. 31	By Balance c/d	6,400
1991			1991		
Jan. 1	To Balance b/d	6,400	Dec. 31	By Balance c/d	12,800
Dec. 31	To Cash	6,400			
		12,800			12,800
	To Balance b/d To Cash	12,800 6,400 800		By Cash	20,000
		20,000			20,000

6. **Revaluation Method:** As the name implies under **revaluation method**, the assets are valued at the end of each period so that the difference between the old value and the new value, which represents the actual depreciation can be charged against the profit and loss account. This method is mostly used in case of assets like bottles, horses, packages, loose tools, casks etc. On rare occasions when on revaluation the value of an asset is found to have increased, it being of temporary nature not taken into account.

Revaluation method is open to various objections like:

Firstly, the method do not specify as to which is the value that the experts are to estimate at the end of each year. It however appears that this is the market value. If so, to assess depreciation with reference to market value is against the basic principles and theory of depreciation. A fixed asset has nothing to do with market value.

Secondly, the charge against profit and loss account on account of depreciation will vary year to year through the asset renders the same service throughout of its life time.

Thirdly, this method is unscientific, because there are great chance of manipulations.

METHODS OF RECORDING DEPRECIATION

There are two ways of recording depreciation in the Books:

Method 1: When no provision for Depreciation Account is maintained

Under this method, depreciation is directly charged to an Asset Account by debiting Depreciation Account and crediting the Asset Account. At the end of the accounting period, Depreciation Account is closed by transferring it to the Profit & Loss Account. In the Balance Sheet, the asset appears at its written-down value. Here, actual cost of an asset and the total amount of depreciation that has been provided cannot be determined from the Balance Sheet.

Journal Entries

1. Depreciation A/c Dr.

   To Asset A/c

(Being depreciation provided for the accounting year)

2. Profit & Loss A/c Dr.

   To Depreciation A/c

(Being depreciation transferred to Profit & Loss Account)

Method 2: When Provision for Depreciation Account is maintained

In contrast to the above, depreciation is not directly charged to the Asset Account.

The Depreciation for the period is debited to Depreciation Account and credited to 'Accumulated Depreciation Account' or 'Provision for Depreciation Account'. Depreciation

Account is closed by transferring it to the Profit & Loss Account. In the Balance Sheet, asset appears at its original cost and the accumulated depreciation is shown as a deduction from the Asset Account. Here, from the Balance Sheet, the original cost of the asset and the total depreciation to-date that has been charged on the asset can be easily ascertained. As the year passes, the balance of the accumulated depreciation goes on increasing since constant credit is given to this account in each accounting year. After the expiry of the useful life, these two accounts are closed by debiting Accumulated Depreciation Account and crediting Asset Account- any balance in Asset Account is transferred to Profit & Loss Account.

Journal Entries

1. Depreciation A/c Dr.

    To Accumulated Depreciation A/c

(Being depreciation provided for the accounting year)

2. Profit & Loss A/c Dr.

    To Depreciation A/c

(Being depreciation transferred to Profit & Loss Account)

Example

Brown purchased a machine by Cheque for Rs.90,000 on 1st January 2002. Its probable working life was estimated at 10 years and its probable scrap value at the end of that time as Rs.10,000. It was decided to write-off depreciation by equal annual installments. You are required to pass the necessary Journal entries for the first two years and show necessary accounts and the Balance Sheet:

a. When no Provision of Depreciation Account is maintained

b. When Provision of Depreciation Account is maintained

(It was decided to close the books each year on 31st December.)

Solution:

$$\text{Annual Depreciation} = \frac{\text{Rs.20,000} - \text{Rs.1,000}}{10} = \text{Rs.8,000}$$

a. When no provision for Depreciation Account in maintained

Dr. Cr.

Date	Particulars		Rs.	Rs.
01/01/02	Machinery A/c Dr. To Bank A/c (Being the purchase of machinery by cheque)		90,000	 90,000
31/12/02	Depreciation A/c Dr. To Machinery A/c (Being depreciation charged to machinery)		8,000	 8,000
31/12/02	Profit & Loss A/c Dr. To Depreciation A/c (Being the depreciation transferred to Profit & Loss Account)		8,000	 8,000
31/12/03	Depreciation A/c Dr. To Machinery A/c (Being depreciation charged to machinery)		8,000	 8,000
31/12/03	Profit & Loss A/c Dr. To Depreciation A/c (Being the depreciation transferred to Profit & Loss Account)		8,000	 8,000

Machinery Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
01/01/02	To Bank A/c	90,000	31/12/02	By Depreciation A/c	8,000
				By Balance c/d	82,000
		90,000			90,000
01/01/03	To Balance b/d	82,000	31/12/03	By Depreciation A/c	8,000
				By Balance c/d	74,000
		82,000			82,000
01/01/04	To Balance b/d	74,000			

. **Depreciation Account**

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
31/12/02	To Machinery A/c	8,000	31/12/02	By P & L A/c	8,000
		8,000			8,000
31/12/03	To Machinery A/c	8,000	31/12/03	By P & L A/c	8,000
		8,000			8,000

Balance Sheet as on 31st December 2002 (extracted)

Liabilities	Rs.	Assets	Rs.
		Machinery 90,000 Less: Depreciation 8,000	82,000

Balance Sheet as on 31st December 2003 (extracted)

Liabilities	Rs.	Assets	Rs.
		Machinery 82,000 Less: Depreciation 8,000	74,000

b. When Provision for Depreciation Account is maintained in the books of Brown

Journal

Date	Particulars		Rs.	Rs.
01/01/02	Machinery A/c Dr.		90,000	
	To Bank A/c			90,000
	(Being the purchase of machinery by cheque)			
31/12/02	Depreciation A/c Dr.		8,000	
	To Accumulated Depreciation A/c			8,000
	(Being depreciation provided for the accounting period)			
31/12/02	Profit & Loss A/c Dr.		8,000	
	To Depreciation A/c			8,000
	(Being the depreciation transferred to Profit & Loss Account)			
31/12/03	Depreciation A/c Dr.		8,000	

	To Accumulated Depreciation A/c (Being depreciation provided for the accounting period)			8,000
31/12/03	Profit & Loss A/c Dr.		8,000	
	To Depreciation A/c (Being the depreciation transferred to Profit & Loss Account)			8,000

Machinery Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
01/01/02	To Bank A/c	90,000	31/12/02	By Balance c/d	90,000
		90,000			90,000
01/01/03	To Balance b/d	90,000	31/12/03	By Balance c/d	90,000
		90,000			90,000
01/01/04	To Balance b/d	90,000			

Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
31/12/02	To Accumulated Depreciation A/c	8,000	31/12/02	By P & L A/c	8,000
		8,000			8,000
31/12/03	To Accumulated Depreciation A/c	8,000	31/12/03	By P & L A/c	8,000
		8,000			8,000

Accumulated Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
31/12/02	To Balance c/d	8,000	31/12/02	By Depreciation A/c	8,000
		8,000			8,000
31/12/03	To Balance c/d	16,000	01/01/03	By Balance b/d	8,000
			31/12/03	By Depreciation A/c	8,000
		16,000			16,000
			01/01/04	By Balance b/d	16,000

Balance Sheet as on 31st December 2002 (extracted)

Liabilities	Rs.	Assets	Rs.
		Machinery (at cost 90,000) Less: Accumulated Depreciation 8,000	82,000

Balance Sheet as on 31st December 2003 (extracted)

Liabilities	Rs.	Assets	Rs.
		Machinery (at cost) 90,000 Less: Accumulated Depreciation 16,000	74,000

Study Notes

Assessment

1. Explain briefly the nature and use of the "revaluation process" of depreciation.
2. State whether following statements are true/false:

    a. The amount of depreciation is credited to depreciation fund account in case of annuity method.
    b. The charge for use of the asset remains uniform each year in case of straight line method.
    c. Depreciation is charged on the book value of the asset each year in case of diminishing balance method.
    d. Depletion method is suitable for charging depreciation in case of stock or loose tools.
    e. Net charge to the profit and loss account is the same under both annuity method and depreciation fund method.
    f. The amount of depreciation is credited to the depreciation fund account in the depreciation fund method.
    g. The asset appears always at original cost in case depreciation is credited to provision for depreciation account.
    h. In case of insurance policy method, the depreciation is credited to the asset account.

    Answer:

a	b	C	d	e	f	G	h
False	False	True	False	True	True	True	False

Discussion

1. Discuss which is the best method of providing for depreciation of the following assets: Loose tools, machinery, live stock, lease, motor vehicles.

3.16 Summary

INVENTORY VALUATION

Inventory valuation helps in evaluating the cost of inventory in an enterprise. Inventories are the most important current asset of a business and proper valuation of them is essential to ensure accurate financial statements. If inventory is not ascertained properly, expenses and revenues will not match and this might mislead the company to make wrong decisions in business.

INVENTORY COSTING METHOD

There are three major costing methods in Inventory management, namely First-In-First-Out, Last-In-First-Out and Weightage Average method.

FIRST-IN, FIRST-OUT CALCULATIONS

With first-in first-out, the oldest cost (i.e. the first in) is matched against revenue and assigned to cost of goods sold. Conversely, the most recent purchases are assigned to units in ending inventory.

LAST-IN, FIRST-OUT CALCULATIONS

Last-in first-out is just the reverse of FIFO. Here, recent costs are assigned to goods sold while the oldest costs remain in inventory.

WEIGHTED-AVERAGE CALCULATIONS

The weighted average method relies on average unit cost to calculate cost of units sold and ending inventory. Average cost is determined by dividing total cost of goods available for sale by total units available for sale.

PERPETUAL INVENTORY SYSTEM

Perpetual inventory system may be defined as a method of recording stores balances after every receipt and issue to facilitate regular checking and to obviate closing down for stocktaking.

PERPETUAL FIFO

With perpetual FIFO, the first (or oldest) costs are the first moved from the Inventory account and debited to the Cost of Goods Sold account.

PERPETUAL LIFO

With perpetual LIFO, the last costs available at the time of the sale are the first to be removed from the Inventory account and debited to the Cost of Goods Sold account.

INVENTORY ESTIMATION TECHNIQUE

There are two Inventory estimation techniques Gross Profit Method and Retail Method.

DEPRECIATION

Accounting Standard (AS-6) issued by Institute of Chartered Accountants of India defines depreciation as follows

"Depreciation is a measure of wearing out consumption or other loss of value of depreciable asset arising from use, effluxion of time or obsolescence through technology and market changes. Depreciation is allocated so as to charge a fair portion of the depreciable amount in each accounting period during the expected useful life of the assets."

CAUSES OF DEPRECIATION

There is a host of factors contributing to depreciation usage, passage of time, obsolescence, exhaustion or depletion, inadequacy.

METHODS OF CHARGING DEPRECIATION

There are various methods of charging depreciation like Equal installment or Straight line or Original cost method, Diminishing Balance Method or Written down value method or Reducing Installment method, Annuity Method, Depreciation fund method or Sinking fund amortization fund method, Insurance policy method and Revaluation method.

3.17 Self Assessment Test

Broad Questions

1. What is depreciation? What are the various methods of calculating depreciation?
2. Compare LIFO, FIFO and Weighted Average method of inventory valuation..

Short Notes

a. Inventory valuation methods

b. Causes of depreciation

c. Inventory errors

d. LIFO

e. FIFO

f. Weighted-Average

Practical Questions

1. On 1/04/1999, M/s Eastern Manufacturing Co. Ltd. purchased 6 machines of Rs.30,000 each. On 1/4/2000, one machine became defective and was sold for Rs.25,000. Again, on 1/4/2001, a second machine was sold for Rs.25,000. On 1/10/2000, a new machine of higher technical reliability was acquired for Rs.56,000. Depreciation is charged @10% on initial cost and debited to Profit and Loss A/c and credited to Provision for Depreciation Account on 31st March each year.

Prepare necessary accounts in the Books of the Company.

2. New Age Corporation had a balance of Rs.1,62,000 to the debit of Plant and Machinery A/c on 1/1/2000. During 2000, part of the plant purchased on 1/1/1998 for Rs.20,000 was sold for Rs.12,500 on 1/7/2000 and a new machinery at the cost of Rs.23,500 was purchased and installed on the same date, the installation charges being Rs.1,500.

The Corporation charges depreciation @10% on diminishing balance. It was decided to change the method of charging depreciation to straight line method retrospectively w.e.f. 1/1/1998, the rate of depreciation remaining the same as before.

Prepare the Plant and Machinery A/c.

3. Thompson Bros., a firm, purchased a machinery by cheque for Rs.1,00,000 on 1st January, 1990. The estimated scrap value of the machinery is Rs.20,000. At the end of each year, depreciation is provided at the rate of 10% p.a. by the diminishing balance

method. Show Machinery Account and Balance Sheet (extracted) for the first two financial years, ending on 31st December every year, when no provision for depreciation account is maintained and also when provision for depreciation account is maintained.

3.18 Further Reading

1. Intermediate Accounting, Thomas R. Dyckman, McGraw Hill, 2000

2. Cornerstones of Financial & Managerial Accounting, Jay S. Rich, Jefferson P. Jones, Dan L. Heitger, Maryanne M. Mowen, Don R. Hansen, South Western College, 2009

3. Principles of Accounting, Belverd E. Needles, Marian Powers, Susan V. Crosson, South Western Educational Publishing, 2007

4. Fundamentals of Accounting: Course 2, Claudia B. Gilbertson, Mark W. Lehman, South Western Educational Publishing, 2008

Assignment

Visit any two industries in your area and check the inventory management system they follow. Make a comparative report on the systems.

Unit 4 Management Accounting Concepts and Budgeting

Learning Outcome

After reading this unit, you will be able to:

- Explain the Management Accounting concepts
- Outline the importance and scope of Management Accounting
- Differentiate between Management Accounting and Financial Accounting
- Explain budget and budgetary control
- Practice zero based budgeting

Time Required to Complete the unit

1. 1st Reading: It will need 3 Hrs for reading a unit
2. 2nd Reading with understanding: It will need 4 Hrs for reading and understanding a unit
3. Self Assessment: It will need 3 Hrs for reading and understanding a unit
4. Assignment: It will need 2 Hrs for completing an assignment
5. Revision and Further Reading: It is a continuous process

Content Map

4.1 Introduction

4.2 Management Accounting

4.3 Definition and Scope of Management Accounting

4.4 Comparison of Management Accounting and Financial Accounting

4.5 Budgetary Control

4.6 Budgetary Control Method

4.1 Introduction

All over the world, the one pertinent problem that looms large and terrorizes all the nations is how to efficiently utilize the already scarce and depleting resources. Over years, this has transformed itself into a problem that every company, every government and each one of us in our families and as individuals encounters in some form at some point in time.

Wherever there is a problem, solutions are invented. So also, allocation of scarce resources is facilitated by many institutions in the United States and throughout most of the world. Examples of such institutions are The New York Stock Exchange, the London Stock Exchange, the Chicago Board of Trade and all other stock, bond and commodity markets. These financial markets are sophisticated and apparently, efficient mechanisms for channeling resources from investors to those companies that investors believe will use those resources most profitably.

Banks and other lending institutions also allocate scarce resources across companies, through their credit and lending decisions. Governments also do allocation of scarce resources across different segments of the society. This is done by collecting taxes from companies and individuals and then properly allocating these scarce resources to achieve social and economic goals.

Financial Accounting is used as a primary source of information for these allocation decisions by all of these institutions. Investors and stock analysts review corporate financial statements prepared in accordance with Generally Accepted Accounting Principles (GAAP). Both the financial statements as well as projections of cash flows and financial performance are reviewed by banks.

4.2 Management Accounting

Thus, the main purpose of both financial accounting and management accounting is the right allocation of the scarce resources. Financial accounting is the principle source of information for decisions on how to allocate resources among companies; management accounting is the principle source of information for decisions of how to allocate resources within a company. Management Accounting provides information that helps managers to control activities within the firm and to decide what products to sell, where to sell them, how to source those products and which managers to entrust with the company's resources.

Management accounting information is proprietary. This means that it is not mandatory for public companies to disclose management accounting data or many specifications about the systems that generate this information. Usually, companies disclose very little management accounting information to investors and analysts beyond what is contained in the financial reporting requirements. A company discloses such kind of essential information like unit sales by major product category or product costs or product type only when the management is sure about the fact that the voluntary disclosure of this information will be viewed as “good news” by the marketplace.

Management accounting systems mostly work well. Therefore, it becomes difficult for a company to have an edge over its competitors by employing a better management accounting system. However, this observation does not imply that management accounting systems are not important to organisations. On the contrary, poor management accounting systems can significantly affect the investment community’s perception of a company’s prospects.

	Study Notes

	Assessment
1. Define "Management Accounting"	

	Discussion
1. Discuss the distinctive features of Management Accounting	

4.3 Definition and Scope of Management Accounting

Management accounting or managerial accounting is concerned with the provisions and use of accounting information to managers within organisations. It is meant to provide them with the basis to make informed business decisions that will permit them to be better equipped in their management and control functions. It is the process of measuring and reporting information about economic activity within organisations to be used by managers in planning, performance evaluation and operational control.

Planning: Planning is a process meant for the purpose of accomplishment. It is a blueprint of business growth and a road map of development. It helps in fixing objectives both in quantitative and qualitative terms. It is setting of goals based on aims, in keeping with the resources, for example, deciding what products to make and where and when to make them. It also determines the materials, labor and other resources that are required to achieve the desired output. In not-for-profit organisations, deciding which programmes to fund is also planning.

Performance evaluation: It refers to the evaluation of the profitability of individual products and product lines. It is a method by which the job performance of an employee is evaluated (generally in terms of quality, quantity, cost and time), typically by the corresponding manager or supervisor. The main objective of performance evaluation is to assess the extent to which an individual has added wealth to the firm and whether his performance is above or below the market or industry norms. It also determines the relative contribution of different managers and different parts of the organisation. In not-for-profit organisations, it is the evaluation of the effectiveness of managers, departments and programmes.

Operational control: It is the authority vested in the management to lead the activities of an organisation. It is to ensure that day-to-day actions are consistent with established plans and objectives. Corrective action is taken where performance does not meet standards. It also involves assigning tasks, designating objectives and giving authoritative direction necessary to accomplish the goals of an organisation. Examples include (a) knowing how much work-in-process is on the factory floor and at what stages of completion (b) to assist the line manager in identifying bottlenecks and maintaining a smooth flow of production.

In addition, the management accounting system usually feeds into the financial accounting system. In particular, the product costing system is generally used to determine inventory Balance Sheet amounts and the cost of sales for the income statement.

Management accounting information is usually financial in nature and Rupee-denominated, although increasingly, management accounting systems collect and report nonfinancial information as well.

Businesses can be categorised by the sector of the economy in which they operate. For example, the chief function of a manufacturing firm is to convert raw materials into finished goods. Agricultural and natural resource companies are also included in manufacturing firms. On the other hand, merchandising firms buy finished goods for resale. Legal advice, hairstyling and cable television are included in the category of service sector companies as they sell service and carry limited inventories, if any. Businesses can also be categorised by their legal structure: corporation, partnership, proprietorship. Finally, businesses can also be categorised by their size.

All of these organisations use management accounting extensively. Management accounting is also used by individuals in taking economic decisions in their personal lives, like home and automobile purchases, retirement planning and splitting the cost of a vacation rental with friends.

Study Notes

Assessment

1. Explain the concept of Management Accounting

2. What is the purpose of Management accounting.

Discussion

1. Discuss the application of Management Accounting in Business.

4.4 Comparison of Management Accounting and Financial Accounting

The field of accounting consists of three broad subfields: financial accounting, management accounting and auditing. This classification is user-oriented. Financial accounting is concerned with the preparation of financial statements for decision makers such as stockholders, suppliers, banks, employees, government agencies, owners and other stakeholders. Management accounting is concerned with the provisions and use of accounting information to managers within organisations, to provide them with the basis to make informed business decisions that will allow them to be better equipped in their management and control functions. Auditing refers to examining the authenticity and usefulness of all types of accounting information. Other subfields of accounting include tax and accounting information systems.

These differences are generalisations and are not universally true. For example, GAAP allows choosing any methods for inventory flow, such as the FIFO or LIFO. In addition, GAAP uses predictions of future events and transactions to value assets and liabilities under certain circumstances. Nevertheless, the differences between financial accounting and management accounting shown above reveal important attributes of financial accounting that are driven by the goal of providing reliable and understandable information to investors and regulators. These investors are located quite far from the companies in which they have invested and are interested in the results regarding the profits/losses earned by the organisation. Therefore, a regulatory and self-regulatory institutional structure exists to ensure the quality of the information provided to these external parties.

For example, financial accounting makes use of historical information, not because investors are interested in the past, but rather because it is easier for accountants and auditors to concur on what happened in the past than to agree on management's predictions about the future. The past can be "audited." Investors then use this information about the past to make their own predictions about the company's future.

As another example, financial accounting follows a set of rules (GAAP in the U.S.) that investors can study. Once investors obtain an understanding of GAAP, the fact that all U.S. companies comply with the same rules greatly facilitates investors' ability to follow multiple companies. In addition, the fact that financial reporting is mandatory for all public companies ensures that the information will be obtainable.

Management accounting, on the other hand, serves an entirely different audience, with different needs. Management Accounting provides detailed information that is meant for specific users. For example, managers require detailed information about their part of the organisation. Managers must also make decisions, sometimes on a daily basis, that affect the future of the business. So, Management Accounting provides necessary information central to future course of action. This information serves as input in those decisions, no matter how subjective those estimates are.

Table 4.1: Comparison between Financial Accounting and Management Accounting

Financial Accounting	**Management Accounting**
Backward looking: Focuses mostly on reporting past performance	Forward looking: Includes estimates and predictions of future events and transactions
Emphasis on reliability of the information	Can include many subjective estimates
Provides general purpose information used by investors, stock analysts and regulators (one size fits all)	Provides many reports tailored to specific users
Provides a high-level summary of the business	Can provide a great deal of detail
Reports, almost exclusively, in Rupee-denominated amounts, a recent exception being the increasing (but still infrequent) use of the Triple Bottom Line	Communicates many nonfinancial measures of performance, particularly operational data such as units produced and sold by product type

Study Notes

	Assessment
1. What is Financial Accounting. 2. State the difference between Management and Financial Accounting.	

	Discussion
1. Discuss how management accounting got its momentum.	

4.5 Budgetary Control

There are two types of control, namely budgetary and financial. This unit focuses only on budgetary control. Financial control has been covered in detail in units one and two. Budgetary control is defined by the Institute of Cost and Management Accountants (CIMA) as:

"The establishment of budgets relating the responsibilities of executives to the requirements of a policy and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy, or to provide a basis for its revision".

Of all business activities, budgeting is one of the most important actions and therefore requires detailed attention. The unit looks at the concept of responsibility centers and the advantages and disadvantages of budgetary control. It then goes on to look at the detail of budget construction and the use to which budgets can be put. Like all management tools, the unit highlights the need for detailed information, if the technique is to be used to its fullest advantage.

	Study Notes

	Assessment
1. Define "Budgetary control"	

	Discussion
1. Explain the types of control exercised in any Business enterprise.	

4.6 Budgetary Control Method

1. Budget

- A formal statement of the financial resources is reserved for carrying out specific activities in a given period of time.
- It helps to co-ordinate the activities of the organisation.

  An example would be an advertising budget or sales force budget.

2. Budgetary control

- It is a control technique whereby actual results are compared with budgets.
- Any differences (variances) are made the responsibility of key individuals who can either exercise control action or revise the original budgets.

BUDGETARY CONTROL AND RESPONSIBILITY CENTERS

These enable managers to monitor organisational functions.

A responsibility centre can be defined as any functional unit headed by a manager who is responsible for the activities of that unit.

There are four types of responsibility centers:

- **Revenue centers:** Organisational units in which outputs are measured in monetary terms but are not directly compared to input costs
- **Expense centers:** Units where inputs are measured in monetary terms but outputs are not

- **Profit centers:** Units where performance is measured by the difference between revenues (outputs) and expenditure (inputs)
- **Investment centers:** Where outputs are compared with the assets employed in producing them, i.e. ROI

	Study Notes

	Assessment
1. What is a budget?	

	Discussion
1. Discuss responsibility centers in Budgetary control.	

4.7 Advantages of Budgeting and Budgetary Control

There are a number of advantages attached to budgeting and budgetary control:

- It compels the management to weigh the future, which is probably the most important feature of a budgetary planning and control system. It also forces the management to look ahead, to set out detailed plans for achieving the targets for each department, operation and (ideally) each manager, to anticipate and give the organisation purpose and direction

- It promotes coordination and communication.
- It clearly defines areas of responsibility in that it requires managers of budget centers to be made responsible for the achievement of budget targets for operations under their personal control.
- Such a control provides a basis for performance appraisal (variance analysis). A budget is a yardstick against which actual performance is measured and assessed. Control is provided by comparisons of actual results against budget plan. Departures from budget can then be investigated and the reasons for the differences can be divided into controllable and non-controllable factors.
- It facilitates remedial action to be taken as variances emerge.
- It also motivates employees by participating in the setting of budgets.
- This control improves the allocation of scarce resources.
- It economises management time by using the management by exception principle.

PROBLEMS IN BUDGETING

Even though budgets are an indispensable part of any marketing activity, they do have a number of disadvantages, particularly in terms of perception.

- Budgets can be seen as pressure devices imposed by management, thus resulting in:
  - Bad labour relations
  - Inaccurate record keeping
- Departmental conflict arises due to:
  - Disputes over resource allocation
  - Departments blaming each other if targets are not attained
- Difficulties in reconciliation of personal/individual and corporate goals
- Wastage arising as managers adopt the view, "we had better spend it or we will lose it", often coupled with "empire building" in order to enhance the prestige of a department
- Responsibility versus controlling, i.e. some costs coming under the influence of more than one person, e.g. power costs

- Managers overestimating costs so that they will not be blamed in the future that they overspend

CHARACTERISTICS OF A BUDGET

A good budget is characterized by the following:

- Participation: Involve as many people as possible in drawing up a budget.
- Comprehensiveness: Embrace the entire organisation.
- Standards: Base it on established standards of performance.
- Flexibility: Allow for changing circumstances.
- Feedback: Constantly monitor performance.
- Analysis of costs and revenues: This can be done based on product lines, departments or cost centers.

BUDGET ORGANISATION AND ADMINISTRATION

In organising and administering a budget system, the following characteristics may apply:

- Budget centers: Units responsible for the preparation of budgets- a budget centre may encompass several cost centers.
- Budget committee: This may consist of senior members of the organisation, e.g. departmental heads and executives (with the managing director as chairman). Every part of the organisation should be represented on the committee, so there should be a representative from sales, production, marketing and so on. Functions of the budget committee include:
  - Coordination of the preparation of budgets, including the issue of a manual
  - Issuing timetables for preparation of budgets
  - Provision of information to assist budget preparations
  - Comparison of actual results with budget and investigation of variances
- Budget Officer: Controls the budget administration. This involves:
  - Liaising between the budget committee and managers responsible for budget preparation
  - Dealing with budgetary control problems
  - Ensuring that deadlines are met

    - Educating people about budgetary control

- Budget manual: This document:
    - Charts the organisation
    - Details the budget procedures
    - Contains account codes for items of expenditure and revenue
    - Timetables the process
    - Clearly defines the responsibility of personnel involved in the budgeting system

	Study Notes

	Assessment
1. What are the advantages of Budgetary control? 2. State the limitations of Budgetary control. 3. What are the characteristics of Budget.	

	Discussion
1. Discuss the process of organizing and administering a budget system.	

4.8 Steps in Preparing Budget

Following are the steps to remember at the time of preparing budget:

1. **Selecting a budget period:** The length of the budget period depends on the kind of plan being made. Some budget periods will follow the natural cycle time, for example, one year for a sales budget. Management may determine other budget periods, for example, five years for capital expenditure budget.
2. **Setting or ascertaining the objectives**: The objectives of the business have to be set so that the plans may be prepared to achieve those objectives.
3. **Preparing basic assumptions and forecasts**: A statement of the basic assumptions on which the individual budgets are to be based must be prepared. A forecast is then made of the general economic climate and conditions in the industry and for the company. Forecasts are made for the following areas: sales, productions, selling and distribution expense, administrative expense, production expense, research and development expense, cash, purchases, capital expenditure, working capital and master forecast, namely the Income Statement and Balance Sheet Forecasts.
4. **Understanding the need to consider any limiting factor:** A limiting factor prevents a company from expanding to infinity. Limiting factors affect budgeting and they must be considered to ensure that the budgets can be attained. Examples are raw material shortage, labor shortage, insufficient production capacity, low demand for products, lack of capital etc.
5. **Finalizing forecasts**: Forecasts are finalized and now become budgets, which are formally accepted.
6. **Implementing the budget**: Accepted budgets must be implemented. This step onwards, the budget becomes the standard by which performance is measured.
7. **Reviewing forecasts and plans**: Forecasts and budgets have to be reviewed at regular intervals. Changing environment may require changes to be made. Revised budgets may have to be prepared.

Study Notes

	Assessment
1. Describe the process of budget preparation. 2. What are the steps in preparing a budget.	

	Discussion
1. Keeping the above points in mind, prepare budget for a training programme for employees on Team building. The programme is a one day event.	

4.9 Types of Budget and Budget Preparation

Firstly, determine the principal budget factor. This is also known as the key budget factor or limiting budget factor and is the factor that will limit the activities of an undertaking. This limits output in any form, e.g. sales, material or labour.

1. **Sales budget:** A sales budget is a detailed plan showing the expected sales for the budget period. An accurate sales budget is the key to the entire budgeting in some way. If the sales budget is haphazardly prepared, the rest of the budgeting process proves to be a waste of time. The sales budget will help determine how many units will have to be produced. Consequently, the production budget is prepared after the sales budget. The production budget, in turn, is used to determine the budgets for manufacturing costs including the direct materials budget, the direct labor budget and the manufacturing overhead budget. These budgets are then combined with data from the sales budget and

the selling and administrative expenses budget to determine the cash budget. In essence, the sales budget triggers a chain reaction that leads to the development of the other budgets. The selling and administrative expenses budget is both dependent on and a determinant of the sales budget. This reciprocal relationship arises because sales will, in part, be determined by the funds committed for advertising and sales promotion.

The sales budget is the starting point in preparing the master budget. All other items in the master budget, including production, purchase, inventories and expenses depend on it in one way or another. The sales budget is constructed by multiplying the budgeted sales in units by the selling price.

2. **Production budget:** The production budget is prepared after the sales budget. The production budget lists the number of units that must be produced during each budget period to meet sales needs and to provide for the desired ending inventory. The format of Production Budget is as under:

Budgeted sales in units-------------------	XXXX
Add desired ending inventory------------	XXXX

Total need--------------------------------------	XXXX
Less beginning inventory--------------------	XXXX

Required production--------------------------	XXXX
	=====

Production requirements for a period are influenced by the desired level of ending inventory. Inventories should be carefully planned. Too much inventories tie up funds and create storage problems. Deficient inventories can lead to lost sales or crash production efforts in the subsequent period.

3. **Purchase budget:** Manufacturing firms prepare production budget but Purchase budget shows the amount of goods to be purchased during the period. The format of Purchase Budget is as under:

Budgeted cost of goods sold units or dollars	Xxxx
Add desired ending inventory	Xxxx

Total needs	xxxx
Less beginning inventory	xxxx

Required purchases	xxxx
	=====

4. **Labour budget:** The direct labor budget is developed from the production budget. Direct labor requirements must be figured out so that the company will know whether sufficient labor time is available to meet the budgeted production needs. With a prior knowledge of how much labor will be needed throughout the budget year, the company can develop plans to adjust the labor force as the situation requires. Companies that ignore budgets run the risk of facing labor shortages or having to hire and lay off workers at discomfited times. Unpredictable labor policies lead to insecurity, low morale and inefficiency.

   Following is the format of direct labor budget

Required production in cases	xx
Direct labor hours per case	xx
	xxx
Total direct labor hours needed	xx
Direct labor cost per hour	xx
	xxx
Total direct labor cost*	xx
	xxxx

* This schedule assumes that the direct labor workforce will be fully adjusted to the total direct labor hours needed each quarter.

5. **Cash budget:** Cash budget is a meticulous plan showing how cash funds will be acquired and used over some specific time. Cash budget is composed of four major sections.
   - Receipts
   - Disbursements
   - Cash excess or deficiency

- Financing

The cash receipts section consists of a listing of all of the cash inflows, except for financing, expected during the budgeting period. Generally, the major source of receipts will be from sales. The disbursement section consists of all cash payment that is planned for the budgeted period. These payments will include raw material purchases, direct labor payments, manufacturing overhead costs, and so on as contained in their respective budgets. In addition, other cash disbursements such as equipment purchase, dividends and other cash withdrawals by owners are listed.

The cash excess or deficiency section is computed as follows:

Cash balance beginning	XXXX
Add receipts	XXXX

Total cash available	XXXX
Less disbursements	XXXX

Excess (deficiency) of cash available over disbursements	XXXX

If there is a cash deficiency during any period, the company will need to borrow funds. If there is cash excess during any budgeted period, funds borrowed in previous periods can be repaid or the excess funds can be invested.

The financing section deals with the borrowings and repayments projected to take place during the budget period. It also includes interest payments that will be due on money borrowed. Generally speaking, the cash budget should be broken down into time slots, which should be as short as feasible.

6. Master Budget: The master budget is a summary of company's plans that sets specific targets for sales, production, distribution and financing activities. It generally concludes into cash budget, a budgeted income statement and a budgeted Balance Sheet. In short, this budget represents a widespread expression of management's plans for future and of how these plans are to be accomplished.

It usually is composed of a number of separate yet interdependent budgets. One budget may be the prerequisite of the initiation of the other. Moreover, one budget estimate effects other budget estimates because the figures of one budget are usually used in the preparation of other budget. This is the reason these budgets are called interdependent budgets.

The components or parts of master budget are as under:

- Sales Budget
- Production Budget
- Material Budgeting/Direct Materials Budget
- Labor Budget
- Manufacturing Overhead Budget
- Ending Finished Goods Inventory Budget
- Cash Budget
- Selling and Administrative Expense Budget
- Purchases Budget for a Merchandising Firm
- Budgeted Income Statement
- Budgeted Balance Sheet

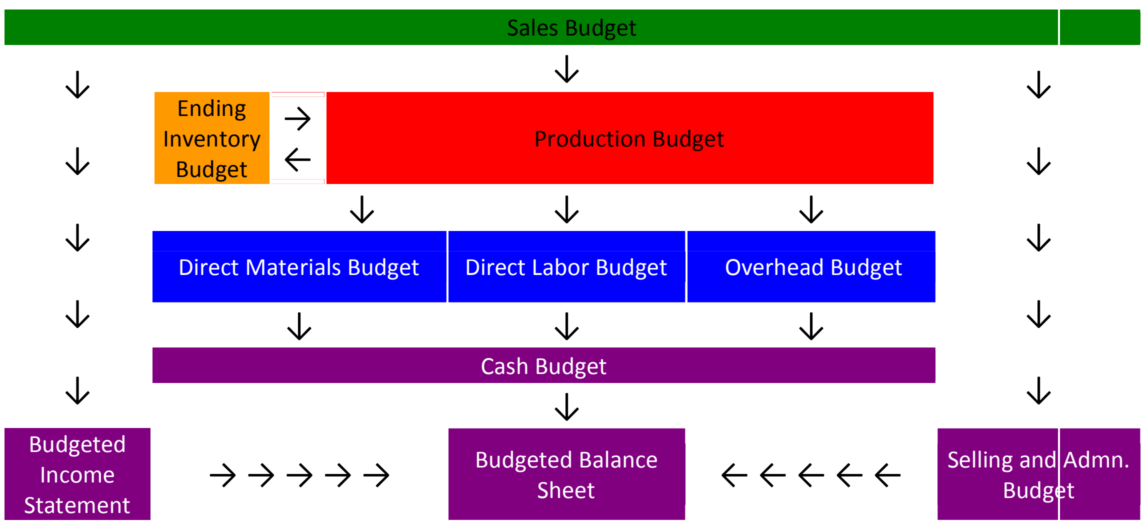

Fig: 4.1 Master budget interrelationship

	Study Notes

Assessment

1. What are the various types of budgets prepared by an organisation?
2. State the components of Master budget.
3. What are the elements of cash budget?

Discussion

1. Discuss the inter-relationship between various types of budgets in organisation.
2. Draw the format for the following budgets:
    a. Master budget
    b. Production Budget
    c. Labour budget
    d. Sales budget

4.10 Steps in preparing a Cash Budget

Step 1: Set out a pro forma cash budget month by month. One layout is suggested below.

Table 4.2: Cash budget layout

	Month 1	Month 2	Month 3
	Rs	Rs	Rs
Cash receipts			
Receipts from debtors			
Sales of capital items			
Loans received			
Proceeds from share issues			
Any other cash receipts			
Cash payments			
Payments to creditors			
Wages and salaries			
Loan repayments			
Capital expenditure			
Taxation			
Dividends			
Any other cash expenditure			
Receipts less payments			
Opening cash balance b/d	W	X	Y
Closing cash balance c/f	X	Y	Z

Step 2: Sort out cash receipts from debtors

Step 3: Other income

Step 4: Sort out cash payments to suppliers

Step 5: Establish other cash payments in the month

The following figure shows the composition of a master budget analysis.

Table 4.3: Figure Composition of a master budget

OPERATING BUDGET	FINANCIAL BUDGET
consists of:	consists of:
Budget P/L acc: get:	Cash Budget
Production Budget	Balance Sheet
Materials Budget	Funds Statement
Labour Budget	
Admin. Budget	
Stocks Budget	

Other budgets:

These include budgets for

- Administration
- Research and development
- Selling and distribution expenses
- Capital expenditures
- Working capital (debtors and creditors)

PRICE AND QUANTITY VARIANCES

Mere mention of a variance on a particular item of expenditure does not really signify much. Most costs are composed of two elements - the quantity used and the price per unit. A variance between the actual cost of an item and its budgeted cost may be due to one or both of these factors. Apparent similarity between budgeted and actual costs may conceal significant compensating variances between price and usage.

For example, suppose it is budgeted to take 300 man-days at Rs 3.00 per man-day, giving a total budgeted cost of Rs 900.00. The actual cost on completion was Rs 875.00, showing a saving of Rs 25.00. Further investigations may reveal that the job took 250 man-days at a daily rate of Rs 3.50 - a favourable usage variance but a very unfavourable price variance. Therefore, management may need to investigate some significant variances revealed by further analysis, which a comparison of the total costs would not have revealed. Price and usage variances for major items of expense are discussed below.

LABOUR

The difference between actual labour costs and budgeted or standard labour costs is known as direct wages variance. This variance may crop up due to a difference in the amount of labour used or the price per unit of labour, i.e. the wage rate. The direct wages variance can be split into:

- Wage rate variance: the wage rate was higher or lower than budgeted, e.g. using more unskilled labour or working overtime at a higher rate.
- Labour efficiency variance: arises when the actual time spent on a particular job is higher or lower than the standard labour hours specified, e.g. breakdown of a machine.

MATERIALS

The variance for materials cost could also be split into price and usage elements:

- Material price variance: arises when the actual unit price is greater or lower than budgeted. This could happen due to inflation, discounts, alternative suppliers etc.
- Material quantity variance: arises when the actual amount of material used is greater or lower than the amount specified in the budget, e.g. a budgeted fertilizer at 350 kg per hectare may be increased or decreased when the actual fertilizer is applied, giving rise to a usage variance.

OVERHEADS

Again, overhead variance can be split into:

- Overhead volume variance: where overheads are taken into the cost centers, a production higher or lower than budgeted will cause an over-or under-absorption of overheads.
- Overhead expenditure variance: where the actual overhead expenditure is higher or lower than that budgeted for the level of output actually produced.

Calculation of Material, Labour and Overhead Variance:

1. Material Price Variance (MPV)

$$MPV = (AP - SP)\ AQ$$

where:

MPV = Material price variance

AQ = Actual quantity of materials purchased

AP = Actual unit price of materials

SP = Standard unit price of materials

2. Material quantity Variance (MQV)

$$MQV = (AQ - SQ)\ SP$$

Where,

MQV = Material quantity variance

SP = Standard unit price of materials

AQ = Actual quantity of materials put into production

SQ = Standard quantity allowed for the output produced

3. Labor Rate Variance (LRV)

$$LRV = (AR - SR)\ AH$$

Where:

LRV = Labor rate variance

AH = Actual labor hours worked

AR = Actual labor rate

SR = Standard labor rate

4. Labor Efficiency Variance (LEV)

$$LEV = (AH - SH)\ SR$$

Where,

LEV = Labor efficiency variance

SR = Standard labor rate

AH = Actual labor hours worked

SH = Standard hours allowed for the output produced

5. Labour Yield Variance (LYV)

LYV = [(Standard hours allowed for expected output × Standard labor rate) – (Standard hours allowed for actual output × Standard labor rate)]

6. Materials Mix Variance (MMV)

MMV = [Actual quantities at individual standard materials costs – Actual quantities at weighted average of standard materials costs]

7. Materials Yield Variance (MYV)

MYV = [Actual quantities at weighted average of standard materials costs – Actual output quantity at standard materials cost]

ILLUSTRATIONS OF VARIANCES

Problem 1: The Trends Furniture Company uses 12 m. of aluminum pipe at Rs. 0.80 per meter as standard for the production of its Type-A lawn chair. During one month's operations, 100,000 m. pipe were purchased at Rs.0.78 a metre and 7,200 chairs were produced using 87,300 metres of pipe. The materials price variance is recognized when materials are purchased.

Required: Materials price and quantity variances

Solution:

	Metres of pipe	Unit Cost (In Rs.)	Amount (In Rs.)
Actual quantity purchased	100,000	0.78 actual	78,000
actual quantity purchased	100,000	0.80 standard	80,000
	-----------	-----------	-----------
Materials purchase price variance	100,000	(0.02)	(2,000) fav.
	=======	=======	=======
Actual quantity used	87,300	0.80 standard	69,840

Standard quantity allowed	86,400	0.80 standard	69120
	-------------	-------------	-------------
Materials quantity variance	900	0.80	720 Unfav
	=======	=======	=======

Problem 2: The standard price for material 3-291 is Rs.3.65 per lit. During November, 2,000 lit were purchased at Rs. 3.60 per lit. The quantity of material 3-291 issued during the month was 1775 lit and the quantity allowed for November production was 1,825 lit. Calculate materials price variance, assuming that:

Required: Materials price variance, assuming that:

1. It is recorded at the time of purchase (Materials purchase price variance).
2. It is recorded at the time of issue (Materials price usage variance).

Solution:

	Litres	**Unit Cost (In Rs.)**	**Amount (In Rs.)**
Actual quantity purchased	2,000	3.60 actual	7,200
Actual quantity purchased	2,000	3.65 standard	7,300
	---------	-------------	---------
Materials purchase price variance	2,000	(0.05)	(100) fav.
	======	======	======
Actual quantity used	1775	3.60 actual	6390.00
Actual quantity used	1775	3.65 standard	6478.75
	--------	-----------	-----------
Materials price usage variance	1775	(0.05)	(88.75)
	======	======	=======

Problem 3: On May 1, Bovar Company began the manufacture of a new mechanical device known as "Dandy." The company installed a standard cost system in accounting for manufacturing costs. The standard costs for a unit of Dandy are:

Materials: 6 lbs. at 1 per lb.	6.00
Direct labor: 1 hour at 4 per hour	4.00
Factory overhead: 75% of direct labor cost	3.00

Total	13.00
	======

The following data were obtained from Bovar's record for May:

Actual production of Dandy	4,000 units
Units sold of Dandy	2,500
Sales	50,000
Purchases (26,000 Rupees)	27,300
Materials price variance (applicable to May purchase)	1,300 unfavorable
Materials quantity variance	1,000 unfavorable
Direct labor rate variance	760 unfavorable
Direct labor efficiency variance	800 favorable
Factory overhead total variance	500 unfavorable

Required:

1. Standard quantity of materials allowed (in Rupees)
2. Actual quantity of materials used (in Rupees)
3. Standard hours allowed
4. Actual hours allowed
5. Actual direct labor rate
6. Actual total factory overhead

Solution:

Actual production	4,000 units
Standard materials per unit	6 Rupees

Standard quantity of materials allowed	24,000 Rupees
	=======
Standard quantity of materials allowed	24,000 Rupees
Unfavorable materials quantity variance **(1,000 variance / 1 standard price per pound)**	1,000 Rupees
	-------------
Actual quantity of materials used	25,000 Rupees
	========
Actual production	4,000 units
Standard hours per unit	1 hour

Standard hours allowed	4,000 hours
	========
Standard hours allowed	4,000 hours
Favorable direct labor efficiency variance **(800 variance / 4 standard rate per direct labor hour)**	(200) hours
	-------------
Actual hours worked	3,800 hours
	=======
Standard direct labor rate	4.00
Unfavorable direct labor rate variance **(760 variance / 3,800 hours**	0.20

actually worked)

Actual direct labor rate	4.20
	======
Standard factory overhead (4,000 units produced × 3 standard overhead rate per unit)	12,000
Unfavorable factory overhead variance	500

Actual total factory overhead	12,500
	=======

Variance Analysis:

On May 1, Bovar Company began the manufacture of a new mechanical device known as "Dandy." The company installed a standard cost system in accounting for manufacturing costs. The standard costs for a unit of Dandy are:

Materials: 6 lbs. at 1 per lb.	6.00
Direct labor: 1 hour at 4 per hour	4.00
Factory overhead: 75% of direct labor cost	3.00

Total	13.00
	======

The following data were obtained from Bovar's record for May:

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Materials quantity variance	1,000 unfavorable
Direct labor rate variance	760 unfavorable
Direct labor efficiency variance	800 favorable
Factory overhead total variance	500 unfavorable

Required:

1. Standard quantity of materials allowed (in Rupees)
2. Actual quantity of materials used (in Rupees)
3. Standards hours allowed
4. Actual hours allowed
5. Actual direct labor rate
6. Actual total factory overhead

Solution:

Actual production	4,000 units
Standard materials per unit	6 Rupees

Standard quantity of materials allowed	24,000 Rupees
	=======
Standard quantity of materials allowed	24,000 Rupees
Unfavorable materials quantity variance **(1,000 variance/1 standard price per pound)**	1,000 Rupees
	-------------
Actual quantity of materials used	25,000 Rupees
	========
Actual production	4,000 units
Standard hours per unit	1 hour

Standard hours allowed	4,000 hours
	========
Standard hours allowed	4,000 hours
Favorable direct labor efficiency variance **(800 variance/4 standard rate per direct labor hour)**	(200) hours
	-------------
Actual hours worked	3,800 hours
	=======
Standard direct labor rate	4.00
Unfavorable direct labor rate variance **(760 variance/3,800 hours actually worked)**	0.20

Actual direct labor rate	4.20
	======
Standard factory overhead (4,000 units produced × 3 standard overhead rate per unit)	12,000
Unfavorable factory overhead variance	500

Actual total factory overhead	12,500
	=======

MANAGEMENT ACTION AND COST CONTROL

Producing information in management accounting form is expensive in terms of the time and effort involved. It will be very wasteful if the information once produced is not put into effective use.

There are five parts to an effective cost control system. They are:

a. Preparation of budgets

b. Communicating and agreeing budgets with all concerned

c. Having an accounting system that will record all actual costs

d. Preparing statements that will compare actual costs with budgets, showing any variances and disclosing the reasons for them and

e. Taking any appropriate action based on the analysis of the variances in d) above.

Action(s) that can be taken when a significant variance has been revealed will depend on the nature of the variance itself. Some variances can be identified to a specific department and it is within the confines of that department's control to take corrective action. Other variances might prove to be much more difficult and sometimes impossible to control.

Variances revealed are historic. They show what happened last month or last quarter and no amount of analysis and discussion can alter that. However, they can be used to influence managerial action in future periods.

	Study Notes

	Assessment

1. What are the steps in preparing cash budget.

2. Explain the concept of Variance.

3. Explain the elements of effective cost control system.

4. What are the various types of variances.

Discussion
1. Discuss variance analysis.

4.11 Zero Based Budgeting (ZBB)

After a budgeting system has been in operation for some time, there is a tendency for next year's budget to be justified by reference to the actual levels being achieved at present. In fact, this is part of the financial analysis discussed so far, but the proper analysis process takes into account all the changes, which should affect the future activities of the company. Despite using such an analytical base, some businesses find that historical comparisons and particularly the current level of constraints on resources can inhibit truly innovative changes in budgets. This can cause a severe handicap for the business because the budget should be for the first year of the long-range plan. Thus, if changes are not initiated in the budget period, it will be difficult for the business to make the essential progress of accomplishing longer-term objectives.

One way of breaking out of this cyclical budgeting problem is to go back to basics and develop the budget from an assumption of 'no existing resources', i.e. a zero base. This means all resources will have to be justified and the chosen way of achieving any specified objectives will have to be compared with the alternatives. For example, in the sales area, the current existing field sales force will be overlooked (for assumption purpose) and the optimum way of achieving the sales objectives in that particular market for the particular goods or services will be developed. This might not include any field sales force or a different-sized team and the company then has to plan how to implement this new strategy.

The obvious problem of this zero-base budgeting process is the massive amount of managerial time needed to carry out the exercise. Hence, some companies carry out the full process every five years. However, the downside is that in that year, the business can almost grind to a halt. Thus, an alternative way is to take an in depth look at one area of the business each year on a rolling basis, so that each sector does a zero base budget every five years or so.

	Study Notes

	Assessment
1. What is Zero-based Budgeting?	

	Discussion
1. Discuss the importance of Zero-based Budgeting in Budgetary control.	

4.12 Summary

FINANCIAL ACCOUNTING

Financial accounting is the principle source of information for decisions on how to allocate resources among companies; management accounting is the principle source of information for decisions of how to allocate resources within a company.

MANAGEMENT ACCOUNTING

Management Accounting provides information that helps managers to control activities within the firm and to decide what products to sell, where to sell them, how to source those products and which managers to entrust with the company's resources.

PLANNING

A process meant for the purpose of accomplishment; a blueprint of business growth and a road map of development; helps in fixing objectives both in quantitative and qualitative terms.

PERFORMANCE EVALUATION

Evaluating the profitability of individual products and product line; determining the relative contribution of different managers and different parts of the organisation; in not-for-profit organisations, evaluating the effectiveness of managers, departments and programs

BUDGETARY CONTROL

- It is a control technique whereby actual results are compared with budgets.
- Any differences (variances) are made the responsibility of key individuals who can either exercise control action or revise the original budgets.

BUDGET

- A formal statement of the financial resources is reserved for carrying out specific activities in a given period of time.
- It helps to co-ordinate the activities of the organisation.

Following are the steps to remember at the time of preparing budget

- Selecting a budget period
- Setting or ascertaining the objectives
- Preparing basic assumptions and forecasts
- Understanding the need to consider any limiting factor
- Finalizing forecasts
- Implementing the budget
- Reviewing forecasts and plans

TYPES OF BUDGET

- Sales budget
- Production budget
- Purchase budget

- Labour budget
- Cash budget
- Master Budget

VARIANCE

A difference between the actual cost of an item and its budgeted cost may be due to one or both of these factors. Apparent similarity between budgeted and actual costs may conceal significant compensating variances between price and usage.

ZERO BASED BUDGETING

After a budgeting system has been in operation for some time, there is a tendency for next year's budget to be justified by reference to the actual levels being achieved at present. In fact, this is part of the financial analysis discussed so far, but the proper analysis process takes into account all the changes, which should affect the future activities of the company. Despite using such an analytical base, some businesses find that historical comparisons and particularly the current level of constraints on resources can inhibit truly innovative changes in budgets. This can cause a severe handicap for the business because the budget should be for the first year of the long-range plan. Thus, if changes are not initiated in the budget period, it will be difficult for the business to make the essential progress of accomplishing longer-term objectives.

4.13 Self-Assessment Test

Broad Questions

1. Compare Financial and Management Accounting with examples.

2. What is budgetary control? Explain various types of budgets.

3. What are the steps involved in budgeting?

Short Notes

a. Advantages of budgetary control

b. Scope of Management accounting

c. Master Budget

d. Zero-based Budgeting

e. Variances

Exercise 4.1 Budgeting I

Draw up a cash budget for D. Shitole showing the balance at the end of each month, from the following information provided by the firm for the six months ended 31 December 19X2.

- Opening Cash Rs 1,200.

	19X2										19X3	
Sales at Rs20 per unit	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
	260	200	320	290	400	300	350	400	390	400	260	250

Cash against sales is received after 3 months following the sales.

- Production in units: 240 270 300 320 350 370 380 340 310 260 250
- Raw materials cost Rs5/unit. Of this, 80% is paid in the month of production and 20% after production.
- Direct labour costs of Rs.8/unit are payable in the month of production.
- Variable expenses are Rs.2/unit. Of this, 50% is paid in the same month as production and 50% in the month following production.
- Fixed expenses are Rs. 400/month, payable each month.
- Machinery costing Rs. 2,000 to be paid for in October 19X2
- Will receive a legacy of Rs. 2,500 in December 19X2
- Drawings to be Rs.300/month

4.14 Further Reading

1. Contemporary Issues in Management Accounting, Alnoor Bhimani, Oxford University Press, 2006
2. Management Accounting Best Practices: A Guide for the Professional Accountant, Steven M. Bragg, Wiley, 2007

3. Management Accounting: Information for Managing and Creating Value, Kim Langfield-Smith, Helen Thorne, McGraw Hill Higher Education, 2005
4. Managerial Accounting: Tools for Business Decision Making, Jerry J. Weygandt, Paul D. Kimmel, Donald E. Kieso, Wiley, 1999

Assignment

Plan a visit to two or three industries and study the budgetary control systems implemented at their end. Present a comparative analysis of the same.

Unit 5 Relevant Costing

Learning Outcome

After reading this unit, you will be able to:

- Identify the elements required for a manager to make informed decisions among alternative courses of action
- Name relevant costs for decision making purposes
- Construct Cost-Volume-Profit analyses and Breakeven charts and explain their usefulness in decision making
- Study the factors affecting the economic choice of whether to make components in-house or buy from outside
- Make decisions on shutdown, additions or deletions to product lines or ranges, important to marketing managers

Time Required to Complete the unit

1. 1st Reading: It will need 3 Hrs for reading a unit
2. 2nd Reading with understanding: It will need 4 Hrs for reading and understanding a unit
3. Self Assessment: It will need 3 Hrs for reading and understanding a unit
4. Assignment: It will need 2 Hrs for completing an assignment
5. Revision and Further Reading: It is a continuous process

Content Map

5.1 Introduction

A relevant cost (also called avoidable cost or differential cost) is a cost that differs between alternatives being considered. It is often imperative for businesses to distinguish between relevant and irrelevant costs when analyzing alternatives because erroneously considering irrelevant costs can lead to unsound business decisions. Further, ignoring irrelevant data in analysis can save time and effort.

Two common types of irrelevant costs are sunk costs and future costs that do not differ between alternatives. Sunk costs are unavoidable because they have already been incurred. Future costs that do not change between alternatives are also essentially unavoidable with respect to the alternatives being considered.

It is important that you know which revenues and costs are relevant and which are non-relevant:

Table 5.1 Relevant and Non-Relevant Costs

Relevant Cost	Non-Relevant Cost
• **Cash** • **Opportunity costs** • **Incremental cash flows**	• **Sunk costs** • **Future costs** • **Non-cash items** • **Share of group-wide fixed overheads**

5.2 Opportunity Cost

Relevant costs may also be expressed as opportunity costs. An opportunity cost is the benefit foregone by choosing one opportunity instead of the next best alternative.

Example

A company is considering publishing a limited edition book bound in special leather. It has in stock the leather bought some years ago for Rs.1,000. To buy an equivalent quantity now would cost Rs.2,000. The company has no plans to use the leather for other purposes, although it has considered the possibilities of using it to cover desk furnishings in replacement for other material, which could cost Rs.900, or of selling it if a buyer could be found (the proceeds are unlikely to exceed Rs.800).

In calculating the likely profit from the proposed book before deciding to go ahead with the project, the leather would not be costed at Rs1,000. The cost was incurred in the past for some reason, which is no longer relevant. The leather does not perish and can be used on the book without incurring any specific cost in doing so. In using the leather on the book, however, the company will lose the opportunities of either disposing it of for Rs.800 or of using it to save an outlay of Rs.900 on desk furnishings.

The better of these alternatives, from the point of view of benefiting from the leather, is the latter. "Lost opportunity" cost of Rs.900 will therefore be included in the cost of the book for decision-making purposes.

The relevant costs for decision purposes will be the sum of:

- 'Avoidable outlay costs', i.e. those costs that will be incurred only if the book project is approved and will be avoided if it is not
- The opportunity cost of the leather (not represented by any outlay cost in connection to the project)

This total is a true representation of 'economic cost'.

Example:

RELEVANT COSTS AND OPPORTUNITY COSTS

Zimglass Industries Ltd. has been approached by a customer who would like a special job to be done for him and is willing to pay Rs.60,000 for it. The job would require the following materials.

Table 5.2: Material, quantity and amount

Material	**Total units required**	**Units already in stock**	**Book value of units in stock Rs/unit**	**Realisable value Rs/unit**	**Replacement cost Rs/unit**
A	1000	0	-	-	16.00
B	1000	600	12.00	12.50	15.00
C	1000	700	13.00	12.50	14.00
D	200	200	14.00	16.00	19.00

Material B is used regularly by Zimglass Industries Ltd and if units of B are required for this job, they would need to be replaced to meet other production demands.

- Materials C and D are in stock due to previous over-buying and they have restricted utilization. No other use could be found for material C, but the units of material D could be used in another job as a substitute for 300 units of material E, which currently costs Rs.15 per unit (of which the company has no units in stock at the moment).

Calculate the relevant costs of material for deciding whether to accept the contract. You must carefully and clearly explain the reasons for your treatment of each material.

The assumptions in relevant costing

Some of the assumptions made in relevant costing are as follows:

- Cost behaviour patterns are known, e.g. if a department closes down, the attributable fixed cost savings would be known.
- The amounts of fixed costs, unit variable costs, sales price and sales demand are known with certainty.
- The objective of decision making in the short run is to maximize 'satisfaction', which is often known as 'short-term profit'.
- The information on which a decision is based is comprehensive and reliable.

Study Notes

Assessment

1. What is relevant cost? State the assumptions of relevant costing

2. What do you mean by non-relevant cost.

3. Write notes on:

   a. Sunk cost
   b. Future costs

	Discussion
1. Discuss the meaning of opportunity cost with an example.	

5.3 Cost Volume Profit (CVP) Analysis

Cost-Volume-Profit is a simplified model, useful for elementary instruction and for short-run decisions.

Cost-volume-Profit (CVP) analysis expands the use of information provided by breakeven analysis. A critical part of CVP analysis is the point where total revenues equal total costs (both fixed and variable costs). At this breakeven point (BEP), a company will experience no income or loss. This BEP can be an initial examination that precedes more detailed CVP analysis. The components of Cost-Volume-Profit Analysis are:

- Level or volume of activity
- Unit Selling Prices
- Variable cost per unit
- Total fixed costs
- Sales mix

CVP assumes the following:

- Constant sales price
- Constant variable cost per unit
- Constant total fixed cost
- Constant sales mix
- Units sold equal units produced

These are simplifying assumptions, which are often implicitly assumed in elementary discussions of costs and profits. In more advanced treatments and practices, costs and revenue are nonlinear and the analysis is more complicated, but the intuition afforded by linear CVP remains basic and useful.

One of the foremost methods of calculating CVP is profit volume ratio: (Contribution /sales)*100 = profit volume ratio.

- Contribution stands for sales minus variable costs.

  Therefore, it gives us the profit added per unit of variable costs.

Basic graph

Fig: 5.1 Basic graph of CVP

The assumptions of the CVP model yield the following linear equations for total costs and total revenue (sales):

$$\text{Total Costs} = \text{Fixed Costs} + \text{Unit Variable Cost} \times \text{Number of Units}$$
$$\text{Total Revenue} = \text{Sales Price} \times \text{Number of Units}$$

These are linear because of the assumptions of constant costs and prices and there is no distinction between Units Produced and Units Sold, as these are assumed to be equal. Note that when such a chart is drawn, the linear CVP model is assumed often implicitly.

In symbols:

$$\mathrm{TC} = \mathrm{TFC} + \mathrm{V} \times \mathrm{X}$$
$$\mathrm{TR} = \mathrm{P} \times \mathrm{X}$$

where

- TC = Total Costs
- TFC = Total Fixed Costs
- V = Unit Variable Cost (Variable Cost per Unit)
- X = Number of Units

- TR = S = Total Revenue = Sales
- P = (Unit) Sales Price

Profit is computed as TR-TC; it is a profit if positive, a loss if negative.

Applications:

CVP simplifies the computation of breakeven in break-even analysis, and more generally allows simple computation of Target Income Sales. It simplifies analysis of short run trade-offs in operational decisions.

Limitations:

CVP is a short run, marginal analysis: It assumes that unit variable costs and unit revenues are constant, which is appropriate for small deviations from current production and sales and assumes a neat division between fixed costs and variable costs, though, in the long run, all costs are variable. For longer-term analysis that considers the entire life cycle of a product, one therefore often prefers activity-based costing or throughput accounting.

BREAKEVEN ANALYSIS

The breakeven point for a product is the point where total revenue received equals the total costs associated with the sale of the product ($T_R = T_C$). A breakeven point is typically calculated in order for businesses to determine if it would be profitable to sell a proposed product, as opposed to attempting to modify an existing product instead, so it can be made lucrative. Breakeven analysis can also be used to analyze the potential profitability of expenditure in a sales-based business.

Breakeven point (for output) = fixed cost / contribution per unit

Contribution (p.u) = selling price (p.u.) - variable cost (p.u)

Breakeven point point (for sales) = fixed cost / contribution (pu) * selling price (pu)

Margin of Safety

Margin of safety represents the strength of the business. It enables a business to know what exact amount it has gained or lost and whether it is over or below the breakeven point.

Margin of safety = (current output - breakeven output)

Margin of safety% = (current output - breakeven output)/current output x 100

If P/V ratio is given, then profit/ PV ratio

== In unit Break Even = FC / (SP − VC)

where FC is Fixed Cost, SP is Selling Price and VC is Variable Cost

The limitations of Break-even Analysis are as under:

1. Break-even analysis is only a supply side (i.e. costs only) analysis, as it tells you nothing about what sales are actually likely to be for the product at these various prices.
2. It assumes that fixed costs (FC) are constant. Although this is true in the short run, an increase in the scale of production is likely to cause fixed costs to rise.
3. It assumes that average variable costs are constant per unit of output, at least in the range of likely quantities of sales (i.e. linearity).
4. It assumes that the quantity of goods produced is equal to the quantity of goods sold (i.e. there is no change in the quantity of goods held in inventory at the beginning of the period and the quantity of goods held in inventory at the end of the period).
5. In multi-product companies, it assumes that the relative proportions of each product sold and produced are constant (i.e. the sales mix is constant).

MAKE OR BUY DECISIONS

A company is often faced with the decision as to whether it should manufacture a component or purchase it from outside.

Presume as an example that Masanzu Ltd. makes four components: W, X, Y and Z, with expected costs for the coming year as follows:

	W	X	Y	Z
Production (units)	1,000	2,000	4,000	3,000
Unit marginal costs	Rs	Rs	Rs	Rs
Direct materials	4	5	2	4
Direct labour	8	9	4	6
Variable production overheads	2	3	1	2
	14	17	7	12

Direct fixed costs/annum and committed fixed costs are as follows:

	W	X	Y	Z
Production (units)	1,000	2,000	4,000	3,000
Unit marginal costs	Rs	Rs	Rs	Rs
Direct materials	4	5	2	4
Direct labour	8	9	4	6
Variable production overheads	2	3	1	2
	14	17	7	12

A subcontractor has offered to supply units W, X, Y and Z for Rs.12, Rs.21, Rs.10 and Rs.14 respectively.

Decide whether Masanzu Ltd. should make or purchase the components from the subcontractor.

Solution and discussion

- The relevant costs are the differential costs between making and buying. They consist of differences in unit variable costs plus differences in directly attributable fixed costs. Subcontracting will bring about some savings on fixed costs.

	W	**X**	**Y**	**Z**
Production (units)	1,000	2,000	4,000	3,000
Unit marginal costs	Rs	Rs	Rs	Rs
Direct materials	4	5	2	4
Direct labour	8	9	4	6
Variable production overheads	2	3	1	2
	14	17	7	12

- The company would save Rs. 3,000/annum by sub-contracting component W and Rs. 2,000/annum by sub-contracting component Z.
- In this example, relevant costs are the variable costs of in-house manufacture, the variable costs of sub-contracted units and the saving in fixed costs.
- Other important considerations are as follows:
    - If components W and Z are sub-contracted, the company will have spare capacity. How should that spare capacity be profitably used? Are there hidden benefits to be obtained from sub-contracting? Will there be resentment from the workforce?
    - Would the sub-contractor be reliable with delivery times and is the quality desirable, i.e. the same as those manufactured internally?
    - Does the company wish to be flexible and maintain better control over operations by making everything itself?
    - Are the estimates of fixed costs savings reliable? In the case of product W, purchasing is clearly cheaper than making in-house. However, for product Z, the decision to buy rather than make would only be financially attractive if the fixed cost savings of Rs.8,000 could be delivered by management. However, in practice, this may not materialize.

Illustrations

1. Rani and Co. manufactures automobile accessories and parts. The following are the total

Processing costs for each unit	(Rs.)
Direct material cost	5,000
Direct labour cost	8,000
Variable factory overhead	6,000
Fixed cost	50,000

The same units are available in the local market. The purchase price of the component is Rs. 22,000 per unit. The fixed overhead would continue to incur even when the component is bought from outside, although there would be reduction to the extent of Rs. 2,000 per unit. However, this reduction does not occur if the machinery is rented out. It is imperative for you to decide the following:

(A) Should the part be manufactured or bought, considering that the present capacity, when released, would remain idle?

(B) In case the released capacity can be rented out to another manufacturer for Rs. 4,500 per unit, what should be the decision?

Solution:

(A) The present capacity when released would remain idle:

Cost Element per unit	**Make**		**Buy**
Direct Material	5,000		
Direct Labour	8,000		
Variable factory overhead	6,000	19,000	
Purchase price			22,000
Reduction in Fixed cost per unit			2,000
		19,000	**20,000**

Since the cost to make is less than the price to buy, it is desirable to manufacture the component, as the idle capacity is not alternatively used.

(B) Statement showing costs of two alternatives when released capacity is rented out:

Cost Element per unit	Make	Buy
Relevant Cost to make	19,000	
Purchase Price		22,000
Relative Income from alternative use per unit		(4,500)
Total relevant Cost	**19,000**	**17,500**

In the above situation, the decision is in favour of buying from outside.

2. Dimpy Co., a radio manufacturing company finds that the existing cost of a component, Z200, is Rs. 6.25. The same component is available in the market at Rs. 5.75 each, with an assurance of continued supply.

The breakup of the existing cost of the component is:

Particulars	**Rs.**
Materials	2.75 each
Labour	1.75 each
Other Variables	0.50 each
Depreciation and other Fixed Cost	1.25 each 6.25 each

(a) Should the company manufacture or buy? Present the case when the firm cannot utilize the capacity elsewhere profitably and when the capacity can be utilized profitably.

(b) What would be your decision, if the supplier has offered the component at Rs. 4.50 each?

Solution:

(a) The decision to make or buy will be influenced by the consideration of whether the capacity to be released, by not manufacturing the component, can be utilized profitably elsewhere.

If the capacity would be idle:

Fixed costs are sunk costs. These fixed costs cannot be saved, as the capacity cannot be utilized in an alternative way profitably. Even if the product is purchased, the firm still must incur fixed costs.

Variable costs per unit, ignoring fixed costs, are:

Particulars	Rs.
Materials	2.75
Labour	1.75
Other variables	0.50
Total	**5.00**

By incurring Rs. 5 component, Z200 can be manufactured by the firm, while it is available in the market at Rs. 5.75 each. Therefore, it is desirable for the firm to make.

If the capacity would not be idle:

Capacity that is released would be utilized elsewhere, profitably. Therefore, the costs that can be avoided by buying are both variable costs as well as fixed costs. Hence, the total costs assume the character of variable costs. Costs that can be saved are

Particulars	Rs.
Materials	2.75 each
Labour	1.75 each
Other Variables	0.50 each
Depreciation and other Fixed Cost	1.25 each
Total	**6.25**

The same product is available at Rs. 5.75. So, by buying, instead of manufacturing, there is a saving of Rs.0.50 per unit. Thus, if the capacity would not be idle, it is better to purchase rather than manufacture.

(b) The marginal cost of the product (only variable expenses) is Rs. 5. If the price offered is Rs. 4.50 per unit, then the offer can be accepted as there will be saving of 50 paise per unit, even if the capacity released cannot be profitably employed. This is so because the price offered is less than the marginal cost of the product.

SHUTDOWN PROBLEMS

Shutdown problems entail the following types of decisions:

- In case a factory, department, product line or other activity is incurring losses or is too expensive, should it continue to run or should it close down?
- If the decision is to shut down, should the closure be permanent or temporary? Shutdown decisions often involve long term considerations and capital expenditures and revenues.

- A shutdown should result in savings in annual operating costs for a number of years in the future.
- Closure results in release of some fixed assets for sale. Some assets might have a small scrap value, but others like property, might have a substantial sale value.
- Employees affected by the closure must be made redundant or relocated, perhaps even offered early retirement. There will be lump sum payments involved, which must be taken into consideration. For example, suppose closure of a regional office results in annual savings of Rs.100,000 and fixed assets are sold off for Rs.2 million, but redundancy payments would be Rs.3 million. The shutdown decision would involve an assessment of the net capital cost of closure (Rs.1 million) against the annual benefits (Rs.100,000 per annum).

It is feasible for shutdown problems to be simplified into short run decisions by making one of the following assumptions:

- Fixed asset sales and redundancy costs would be negligible.
- Income from fixed asset sales would match redundancy costs and so these items would be self-cancelling.

In these circumstances, the financial aspects of shutdown decisions would be based on short run relevant costs.

Study Notes

Assessment

1. What is Cost-Volume Profit analysis? State its assumptions
2. What are the components of CVP analysis.

3. Write notes on:

    a. Margin of Safety

    b. Contribution

    c. Break-even point

4. What are the limitations of Break-even Analysis

Discussion

1. Discuss the points to remember while taking decision on "Make or Buy" situations.

2. Discuss various shut down problems faced by business enterprise

5.4 Absorption Costing

Some of the direct costs associated with manufacturing a product include wages for workers who physically manufacture a product, the raw materials used in producing that product and all of the overhead costs, such as all utility costs, used in producing a good.

Absorption costing includes anything that falls under the head of direct cost in producing a good as the cost base. This is contrasted with variable costing, in which fixed manufacturing costs are not absorbed by the product. Advocates promote absorption costing because fixed manufacturing costs provide future benefits.

Study Notes

Assessment

1. Explain Absorption costing with example.

Discussion

1. Discuss the role of Absorption costing in business.

5.5 Summary

RELEVANT COST

A relevant cost (also called avoidable cost or differential cost) is a cost that differs between alternatives being considered. It is often imperative for businesses to distinguish between relevant and irrelevant costs when analyzing alternatives because erroneously considering irrelevant costs can lead to unsound business decisions.

TYPES OF IRRELEVANT COSTS

There are two types of irrelevant costs, namely, sunk costs and future costs. Sunk costs are unavoidable because they have already been incurred. Future costs that do not change between alternatives are also essentially unavoidable with respect to the alternatives being considered.

OPPORTUNITY COST

An opportunity cost is the benefit foregone by choosing one opportunity instead of the next best alternative.

CVP ANALYSIS

Cost-volume-Profit (CVP) analysis expands the use of information provided by breakeven analysis. A critical part of CVP analysis is the point where total revenues equal total costs (both fixed and variable costs). At this breakeven point (BEP), a company will experience no income or loss. This BEP can be an initial examination that precedes more detailed CVP analysis.

BREAK-EVEN-POINT

The breakeven point for a product is the point where total revenue received equals the total costs associated with the sale of the product ($T_R = T_C$). A breakeven point is typically calculated in order for businesses to determine if it would be profitable to sell a proposed product, as opposed to attempting to modify an existing product instead, so it can be made lucrative.

MARGIN OF SAFETY

Margin of safety represents the strength of the business. It enables a business to know what exact amount it has gained or lost and whether it is over or below the breakeven point.

ABSORPTION COSTING

Absorption costing includes anything that falls under the head of direct cost in producing a good as the cost base. This is contrasted with variable costing, in which fixed manufacturing costs are not absorbed by the product. Advocates promote absorption costing because fixed manufacturing costs provide future benefits.

5.6 Self-Assessment Test

Broad Questions

1. Explain in depth the concept of Relevant Costing

2. What is CVP analysis? Explain the principles of CVP analysis.

Short Notes:

a. Margin of Safety
b. Break-Even Point
c. Shut down Problem
d. Contribution to Sales Ratio
e. Absorption Costing

5.7 Further Reading

1. Relevant Costing, Seong Jae Yu
2. Opportunity Cost, Lewis Henry Haney, Macmillan Company, 1920
3. Cost-volume-profit analysis, Rhonda Hilsenrath

4. Cost and Management Accounting: An Introduction for Students, Alan Pizzey, Thomson, 2006

Assignment

A solution question regarding make or buy decision

Cost of a component "X" and its market price are as under:

a) Direct Material Rs. 400

b) Direct Labour Rs. 200

c) Prime Costs Rs. 600

d) Overhead Cost Rs. 200 (Fixed Rs. 150 and Variable Rs. 50)

e) Total Cost Rs. 800

f) Market Price Rs. 700

The firm is planning to discontinue the production of component "X" and intends to manufacture component "Y" as current market price of "X" is high. Advise the firm about the production if:

(i) Capacity of the plant would remain idle, if "X" is not manufactured and

(ii) Capacity of the plant, that would be freed, can be utilized profitably, in making component "Y". Advise for any other considerations.

Solution:

(i) Case when the capacity would remain idle: The total cost is Rs. 800, while its market price is Rs. 700. Prima facie, it looks it is cheaper to buy rather than making the component. However, analysis shows the correct picture is not so. Fixed costs are sunk costs as they are already incurred and cannot be saved in the short run. In other words, the firm would continue to incur fixed costs, whether the firm makes the component or buys it from the market. The firm cannot utilize the capacity that would be freed, elsewhere, and so remains idle. Hence, fixed costs are permanent costs that cannot be saved, if not utilized elsewhere. Hence, a real comparison is between the total costs (Rs. 800) and aggregate of market price (Rs. 700) along with the fixed costs (Rs. 150) that cannot be saved. The aggregate is Rs. 850. It is not wise to buy at Rs. 850, which can be made at Rs. 800. Therefore, it is desirable for the firm to continue to manufacture the component.

There is another way to explain. Compare variable costs (Rs. 650) with market price (Rs. 700). It is now Marginal Costing. Even in this type of comparison, it is desirable for the firm to continue to manufacture the component.

(ii) Case when the capacity can be utilized elsewhere: Here, the capacity can be utilized profitably elsewhere. In other words, the existing fixed costs would be recovered by making component “Y”. In other words, these fixed costs component of Rs. 150 also can be saved if component “X” is not manufactured. Thus, total savings are:

Particulars	**Rs.**
Direct Material	400
Direct labour	200
Prime cost	600
Variable Overhead Cost	50
Fixed Cost	150
Total Cost	**800**

Total costs that can be saved are Rs. 800. The market price is Rs. 700. Therefore, it is desirable to buy at Rs. 700 instead of incurring Rs. 800.

Other consideration: Further, irregularity of supplies from the outside source should also be taken into account, which is an important issue to be considered, before a final decision. In case the supplies from outside are assured, the firm should go for purchase from outside agency.

When capacity can be alternatively utilized, even the fixed costs become variable costs. Total costs that can be saved are to be compared with the market price for deciding, whether to manufacture or buy the component.

Glossary

Abnormal Loss	Losses arising in the production process that should have been avoided
Absorption Costing	The method of allocating all indirect manufacturing costs to products
Account Payable	An account in the nominal ledger which contains the overall balance of the Purchase Ledger
Accounting	The process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information
Accounts Receivable	An account in the nominal ledger which contains the overall balance of the Sales Ledger
Accumulated Depreciation	Cumulative charges against the fixed assets of a company for wear and tear or obsolescence
Assets	Assets represent what a business owns or is due. Equipment, vehicles, buildings, creditors, money in the bank, cash are all examples of the assets of a business.
Bad Debts	The amount of un-recoverable debts from customers
Balance Sheet	A summary of all the accounts of a business, usually prepared at the end of each financial year. The term 'balance sheet' implies that the combined balances of assets exactly equal the liabilities.
Book Value	It is an accounting term which usually refers to a business historical cost of assets less liabilities.
Break-even point	It is the point at which there is no profit and no loss.
Budget	A plan of financial operation embodying an estimate of proposed expenditures for a given period of time and the proposed means of financing them.
Budgetary Control	The control or management of a governmental unit in accordance with an approved budget for the purpose

of keeping expenditures within the limitations of available appropriations and available revenues.

Capital An amount of money put into the business.

Closing Balance The balance of an account at the end (or close), of an accounting period. This figure is then carried forward to the next accounting period.

Closing Stock Closing stock is the stock of inventory available with the business at the end of the accounting period.

Cost-Volume Profit Analysis Cost volume profit analysis is a study of the response of the total costs, revenues and profit due to the changes in the output level, selling price, variable costs per unit and the fixed costs.

Creditors A list of suppliers to whom the business owes money

Debtors A list of customers who owe money to the business

Depreciation The value of assets usually decreases as time goes by. The amount or percentage it decreases by is called depreciation.

Double-entry book-keeping A system that accounts for every aspect of a transaction - where it came from and where it went to. This *from* and *to* aspect of a transaction (called crediting and debiting) is what the term double-entry means.

Drawing The money taken out of a business by its owner(s) for personal use

FIFO FIFO is the acronym for First In First Out. It assumes that the inventory that is purchased first is used or sold before the inventory that is purchased later.

Fixed Assets These consist of anything which a business owns or buys for use within the business and which still retains a value at year end. They usually consist of major items like land, buildings, equipment and vehicles but can include smaller items like tools.

Generally Accepted Accounting Principles (GAAP) These are the uniform minimum standards for financial accounting and reporting. They govern the form and content of the financial statements of an entity.

Goodwill This is an extra value placed on a business, if the owner of a business decides it is worth more than the value of its assets.

Gross loss The balance of the trading account, assuming it has a debit balance

Gross profit The balance of the trading account, assuming it has a credit balance

Income Money received by a business from its commercial activities

Intangible assets Assets of a non-physical or financial nature. An asset such as a loan or an endowment policy are good examples.

Interest A charge made on a loan or money received on a capital investment

International Financial Reporting Standards (IFRS) International Financial Reporting Standards (IFRS), often known by the older name of International Accounting Standards (IAS), are a set of accounting standards. They are issued by the International Accounting Standards Board (IASB).

Liabilities This includes bank overdrafts, loans taken out for the business and money owed by the business to its suppliers. Liabilities are included on the right hand side of the balance sheet and normally consist of accounts which have a credit balance.

LIFO LIFO is the acronym for Last In First Out. It means that the inventory which is purchased last is used or sold first.

Long term liabilities These usually refer to long term loans (i.e. a loan which lasts for more than one year such as a mortgage).

Management accounting — Accounts and reports are tailor made for the use of the managers and directors of a business (in any form they see fit - there are no rules) as opposed to financial accounts which are prepared for the Inland Revenue and any other parties not directly connected with the business.

Manufacturing account — An account used to show what it cost to produce the finished goods made by a manufacturing business.

Market Value — It is the price at which buyers and sellers trade similar items in an open marketplace. In the absence of a market price, it is the estimated highest price a buyer would be warranted in paying and a seller justified in accepting, provided both parties were fully informed and acted intelligently and voluntarily

Opening Balance — The balance of an account when it is initially opened or the balance carried over from the previous accounting period, (i.e. last accounting periods' closing balance)

Opportunity Cost — The cost of choosing or not choosing one investment plan or an operation over another.

Periodic inventory — A Periodic Inventory is one whose balance is updated on a periodic basis, i.e. every week/month/year.

Perpetual inventory — A Perpetual Inventory is one whose balance is updated after each and every transaction.

Profit and Loss Account — An account made up of revenue and expense accounts which shows the current profit or loss of a business (i.e. whether a business has earned more than it has spent in the current year).

Relevant Cost — A managerial accounting term that is used to describe costs that are specific to management's decisions. The concept of relevant costs eliminates unnecessary data that could complicate the decision-making process.

Return Inward — Goods returned by customers. It is also known as 'sales returns'.

Return Outward	Goods returned to suppliers. It is also known as 'purchases returns.
Salvage/Residual Value	An estimate of the amount that will be realized at the end of the useful life of a depreciable asset
Suspense Account	A temporary account used to force a trial balance to balance if there is only a small discrepancy (or if an account's balance is simply wrong and one do not know why)
Trading Account	An account, which shows the gross profit or loss of a manufacturing or retail business, i.e. sales less the cost of sales
Trial Balance	A statement showing all the accounts used in a business and their balances
Variances	The difference between budget and actual. It can also be used to describe the difference between the opening and closing balance of an account.
Weighted-Average	It is one in which different data in the data set are given different "weights". Varying subjective assumptions are derived for determining the level of importance for each data category.
Zero Based Budgeting	A system where the expenses or costs of the prior year are not taken into consideration when establishing expense or budgetary levels looking forward. Each expense category starts from zero.