UNIT II : ACCOUNTING MECHANICS

1. INTRODUCTION

The financial accounting has evolved over the no of years into a specialized profession. The process of accounting starts with recording in the Journal, preparing ledger accounts, prepare trial balance and final accounts and at the end of this process, the financial statements are circulated to the stakeholders and shareholders. Proper pricing and valuation of inventory and adoption and maintenance of sound depreciation policy also contribute to maximize the earnings of the concern.

2. LEARNING OBJECTIVES

After going through this chapter, the reader is expected to –

1. Understand the accounting cycle that is followed by all the businesses
2. Understand the basic records that every business maintains
3. Understand when revenue is recognized
4. Understand the concept of inventory pricing and valuation
5. Understand how depreciation is calculated and what are the various methods available for calculating for depreciation.

3. BASIC RECORDS

The ***American Institute of certified public accountants (AICPA)*** defined accounting as "Accounting is the art of recording classifying and summarizing in a significant manner and in terms of money transactions and events which are in part at least of a financial character and interpreting the results thereof".

From the above definition the accounting process is very clear. This process of recording the transactions in appropriate books, classifying the various accounts and summarizing in the form of various financial statements and communicating them to all stock holders and stake holders is known as the accounting cycle.

Accounting Cycle

Transaction
!
Recording in either Journal or subsidiary books as the case may be
!
Periodically classifying the various transactions into ledger accounts
!
Preparation of trial balance
!
Preparation of Trading Account
!
Preparation of Profit and Loss Account
!
Preparation of Balance Sheet
!
Circulating the Financial statement to the Stock holders and Stake holders

Journal is known as the original book of entry. It is a book in which a transaction is recorded for the first time in the form of a journal entry. Whenever a transaction happens it is immediately recorded in the journal.

Ledger is a book where various transactions are grouped and classified into several ledger accounts. The closing balances of these accounts give the input for the preparation of trial balance. Ledger accounts are prepared periodically according to the need.

After ledger accounts are prepared, a statement showing the arithmetic accuracy of the recording of information is prepared with the help of closing balances of ledger accounts. This statement is known as a trial balance. This is usually prepared before the preparation of final accounts. The matching of debit and credit column totals implies that the recording is accurate.

Once the trial balance is prepared, the next step is preparation of financial statements. The first statement to be prepared is trading account, which shows the gross profit made by the concern for the accounting year.

After preparing the trading account, every business has to prepare the profit and loss account which shows the net profit earned by the company during the current year.

The last statement as the Balance sheet is prepared to show the financial position of the business on any given day, usually the last day of the financial year. This statement shows the closing balances of various assets and liabilities of the business.

4. PREPARATION OF FINANCIAL STATEMENTS

Every business has to prepare its own financial statements at the end of each accounting year. Financial statements are the statements that show the operational results of a business for a given period and also give the financial position of a concern on a given date. The financial statements prepared by a manufacturing firm include – Manufacturing account, Trading account, Profit and Loss account and Balance sheet. The financial statements prepared by a trading firm include – the Trading account, Profit and loss account and Balance sheet

Trading account is a statement that is prepared for a period of one year. It shows all manufacturing or factory expenses on the debit side and shows sales revenue and closing stock on the credit side. The expenses are matched against the revenues and the result may be Gross profit or Gross Loss. This is carried forward to the Profit & Loss account.

Profit and Loss account is the second statement that is prepared by all the businesses after the trading account. This account shows all expenses other than manufacturing expenses, (office and administration expenses, selling and distribution expenses) and both operating and non-operating losses on its debit side. It shows all incomes and gains, both operating and non-operating on its credit side. The matching of both expenses & losses with the incomes & gains gives the operational results for the year. Usually all businesses follow the mercantile system of accounting (accrual system) while preparing their final accounts. When expenses are less than the incomes, the resulting figure is known as Net profit and if the expenses are more than the incomes, then it will result in Net Loss. This net profit or net loss is carried forward to the Balance sheet to be adjusted against the capital.

Balance sheet is a statement showing the financial position of a business on a given date, which is usually the last day of the financial year / accounting year. This statement shows the balances of all liabilities it owes to the outsiders on the debit side and the balances of assets on the credit side of the statement. All outstanding expenses which belong to the current year but have not yet been paid will be shown on the liabilities and all expenses which are paid for the future period are shown on the credit side of the statement. Similarly, all incomes which belong to the current year, but have not yet been received will be shown on the credit side of the statement and all incomes which belong to the future but have already been received in advance are shown on the debit side of the statement. The general rule is that both the sides must be the same, showing that every debit has an

While preparing the final accounts, all the adjustments which have not been made to the balances must be adjusted.

Illustration

The following trial balance is extracted from the books of Mr.Pillai on 31.03.2002

PARTICULARS	DEBIT (Rs)	CREDIT (Rs)
Furniture & Fittings	640	-
Motor Vehicles	6,250	-
Buildings	7,500	-
Capital	-	12,500
Bad debts	125	-
Provision for doubtful debts	-	200
Sundry debtors & Creditors	3,800	2,500
Stock as on 1.4.2002	3,460	-
Purchases and Sales	5,415	15,540
Bank Overdraft	-	2,850
Sales & Purchase returns’	200	125
Advertising	450	-
Interest on Bank overdraft	118	-
Commission	-	375
Cash	650	-
Taxes & Insurance premium	782	
General expenses	1,250	-
Salaries	3,300	-
TOTAL	**34,000**	**34,000**

Adjustments:

1) Stock on hand on 31.3.2002 Rs.3,250
2) Depreciate Buildings @5% pa, Furniture @ 10% pa, Motor Vehicles @ 20% pa
3) Rs.85 is due for interest on bank overdraft
4) Salaries Rs.300 and taxes Rs.200 are outstanding
5) Insurance premium amounting to Rs.100 is prepaid
6) One third of the commission received is in respect of work to be done next year
7) Write off a further sum of Rs.100 as bad debts from debtors and create provision for doubtful debts @ 5% on debtors

Prepare a trading and Profit & Loss account and Balance sheet of the company.

Solution:

Trading and P&L account for the year ended 31st March 2002

Particulars	Amount	Particulars	Amount
To opening stock	3460	By Sales 15,450	
To purchases 5475		Less: returns 200	15,250
Less: returns 125	5350	By closing stock	3,250
To Gross profit	**9690**		
To baddebts 125		By Gross profit	9690
(+)Further baddebts		By Commission 375	
Written off 100		(-)received in advance 125	250
(+)5% provision for			
doubtful debts 185			
410			
(-)old provision for			
doubtful debts 200	210		
To advertising	450		
To interest on Bank			
Overdraft 118			
(+)outstanding 85	203		
To general expenses	1250		
To salaries 3300			
(+)outstanding 300	3600		
To taxes & insurance 782			
(+)outstanding taxes 200			
982			
(-)Prepaid insurance			
premium 100	882		
To depreciation:			
Buildings @ 5% 375			
Furniture @ 10% 64			
Motor vehicles @ 20% 1250	1689		
To Net profit	**1656**		
	9940		**9940**

Balance sheet of Mr.Pillai as at 31st March 2002

Liabilities		Amount	Assets		Amount
Capital	12500		Furniture & fixtures	640	
(+)Net profit	1656	14156	(-) depreciation	64	576
Sundry creditors		2500	Motor vehicles	6250	
Bank overdraft		2850	(-) depreciation	1250	5000
Outstanding salaries		300	Buildings	7500	
Outstanding taxes		200	(-) depreciation	375	7125
Outstanding interest on			Sundry debtors	3800	
bank overdraft		85	(-)baddebts writtenoff	100	
Commission received in		125		3700	
advance			(-)5% new provision	185	3515
			Cash		650
			Closing stock		3250
			Prepaid insurance premium		100
		20,216			**20,216**

Illustration 2

From the following Trial Balance of Evergreen and Company Limited, prepare Trading, Profit and Loss Account and Balance Sheet.

Trial Balance as on 31-12-1995:

	Rs.	Rs.
Cash in Hand	2,400	
Purchases	2,40,000	
Stock as on 1-1-95	70,000	
Debtors	1,00,000	
Plant & Machinery	1,20,000	
Furniture	30,000	
Bills Receivable	40,000	
Rent & Taxes	20,000	
Wages	32,000	
Salaries	37,600	
Capital		2,00,000
Bills Payable		44,000
Creditors		48,000
Sales		4,00,000
	6,92,000	6,92,000

Adjustments:

(1) Closing inventory as on 31-12-1995 : Rs. 50,000
(2) Outstanding wages : Rs. 5,000
(3) Depreciation on Plant & Machinery at 10% Furniture at 5%

Solution:

Trading and P&L account for the year ended 31st March 2002

Particulars		Amount	Particulars	Amount
To opening stock		70,000	By Sales	4,00,000
To purchases		2,40,000	By closing stock	50,000
To Wages	32,000			
Add: outstanding	5,000	37,000		
To Gross profit		1,03,000		
To depreciation:			By Gross profit	1,03,000
Plant & Machinery		12,000		
Furniture		1,500		
To Rent & Taxes		20,000		
To salaries		37,600		
To Net profit		31,900		
		1,03,000		**1,03,000**

Balance sheet as at 31st March 2002

Liabilities		**Amount**	**Assets**		**Amount**
Capital	2,00,000		Cash in hand		2,400
(+)Net profit	31900	2,31,900	Debtors		1,00,000
Sundry creditors		48,000	Plant & Mach	1,20,000	
Outstanding Wages		5,000	Less Dep	12,000	1,08,000
Bills payable		44,000	Furniture	30,000	
			Less Dep	1,500	28,500
			Bills receivable		40,000
			Closing stock		50,000
		3,28,900			**3,28,900**

5. REVENUE RECOGNITION & MEASUREMENT

Under accrual system of accounting revenues from the sale of merchandise are considered to be earned in the accounting year in which the ownership of goods passes from the seller to the buyer. As a result even though cash for the sale may not be collected until the following period, the revenue is recognized as being earned at the time of sale. Usually the physical delivery of goods occurs at the same time as the sale of the goods.

Sales revenue is regarded as earned if the following conditions are satisfied.

1) The seller has passed the legal ownership of the goods to the buyer
2) The selling price of the goods has been established
3) The buyer has paid the purchase price of the goods or it is certain that he will pay the price. If any of these conditions are not fulfilled revenue cannot be recorded.

6. MATCHIING REVENUES AND EXPNSES

During the process of preparing the trading and profit loss account, the relevant expenses and revenues are matched to arrive at the operating results of the business i.e. profit or loss. Expenses may be categorized as manufacturing expenses, office and administration expenses and selling & distribution expenses. Revenues may arise from sale of products and services or from sale of fixed assets and income from investments. In trading account the manufacturing expenses are matched against the sales and closing stock to arrive at the gross profit or loss. In profit and loss account the office administration expenses, selling & distribution expenses along with other non-operating expenses or less are matched against the operating and non-operating incomes arising out of the business. This results in net profit or net loss. Usually the mercantile system of accounting is adopted while preparing the financial statements. All the receivables and payables are considered and shown in the appropriate statements provided they belong to the current year.

7. INVENTORY PRICING AND VALUATION

Inventories refers to unsold goods purchased or manufactured. According to the Accounting Standard :2 (Revised), inventories are assets :

(a) held for sale in the ordinary course of business ;
(b) in the process of production for such sale or
(c) in the form of materials or supplies to be consumed in the production process of in the rendering of services.

Thus, the term inventory include stock of (i) finished goods (ii) work-in-progress and (iii) raw materials and components. In case of a trading concern, inventory primarily consists of finished goods while in case of a manufacturing concern, inventory consists of raw materials, components, stores, work-in-process and finished goods.

Objectives of inventory valuation

1) Determination of income
2) Determination of financial position

Inventory Systems :

1) Periodic inventory system :

Under this system the merchandise inventory account is updated only periodically, after a physical count has been made. Usually, the physical count takes place at the end of the accounting period. Many departmental stores use this system

2) Perpetual inventory system :

Perpetual inventory system has been defined as ' a system of record maintained by the controlling department, which reflects physical movement of stocks and their current balances i.e. it is technique of controlling stock by maintaining stock records, such as bin card in stores and stores ledger in accounts, in such a manner that the stock balance is available at any point of time (perpetually)'. Under this system stores ledger is recorded after each transaction of receipt, issue or transfer. This facilitates regular stock verification physically which obviates the stoppage of work for stock taking.

The success of perpetual inventory system depends on (1) maintenance of bin cards and stores ledger up-to-date (2) reconciliation of quantity balance as shown by bin cards with that in stores ledger (3) continuous verification of physical stock with bin card quantity (4) reconciliation of discrepancies arising out of physical verification, as well as comparison with stores ledger (5) remedial action to remove the cause of discrepancies (6) correction of stock records.

Methods of valuation of inventories or Pricing Issues of Material :

Materials issued from stores should be valued at the rate they are carried in stock. The various methods for pricing material issues from stores are classified as follows :

1) Specific identification method

This method is applicable to materials purchased for a particular job, order or process, and identified when received either in stores or in the shop floor directly. Such materials are usually non-standard and actual cost is charged to the job/order/process concern. No question of difference arises out of such pricing.

2) First in First Out (FIFO)

This method assumes that materials are used in the order in which they are received in stores (chronologically). Hence the price of the first lot is charged to all issues till the stock losts. As a result closing stock will be valued at latest purchase price.

This method is useful in the slow moving or less frequently used materials of bulk items and high unit costs.

3) Last In First Out (LIFO)

This method assumes that the last receipt of stock is issued first. Hence issues are priced at current prices, while stock remains at historical cost. This method is useful under the inflationary conditions of the market.

This method is useful for materials used less frequently and under inflationary conditions.

4) Highest in First Out (HIFO)

Under this method issues are valued at their highest price i.e. costliest items are issued at first, and inventory is kept at lowest possible prices. Thus a secret reserve is created by undervaluing stock. This method is complicated to administer if there are numerous purchases within a short period.

This method is mainly used for monopoly products or cost plus contracts.

5) Base Stock Method

This method assumes that a minimum stock is always carried at original cost. The issues are priced using one of the conventional method like FIFO, LIFO, etc, at actual costs.

This method will be suitable for tanning, smelting, oil refineries, etc. which use basic raw materials like hides, non-ferrous metal, and crude oil for their products.

6) Next In First Out (NIFO)

Under this method issues are valued at the price expected the next purchase i.e. price of material which has been ordered but not yet received. Problem may arise if the price ruling at the time of supply defers from the purchase order price. However this method attempts to value issues at nearest to current market prices.

7) Weighted Average Price Method

This method gives due importance to quantities received also. Issue prices are calculated at average cost price of materials in hand i.e. by dividing the value of materials in stock by the quantities in stock. Weighted average price remains the same till the next issue is received. Thus issue prices are derived at the time of receipt and not at the time of issues.

This method is suitable where wide fluctuation of prices occur as it evens out prices over the accounting period.

8. NET REALISATION VALUE :

According to International Accounting Standard 2 (IAS 2) the Net realizable value means " the estimated selling price in the ordinary course of business less costs of completion and less costs necessarily to be incurred in order to make the sale".

Under this method, Inventories are to valued at cost or net realizable value whichever is less.

9. FIXED ASSETS AND DPERECIATION ACCOUNTING

Fixed Assets :

Fixed assets refer to the various tangible and intangible assets used in the business for producing and selling the products or rendering services to the customers. Fixed assets are characterized by their long term investment in the business.

Depreciation :

Depreciation is a permanent, continuing and gradual shrinkage in the book value of a fixed asset due to use, wear and tear, obsolescence or effluxion of time.

Characteristics of Depreciation :

1) It refers to the fall or shrinkage in the true value of an asset

2) It refers to a fall in the book value of asset, which may or may not be equal to the market value or the cost price of the asset.
3) The fall in the book value in a slow and gradual process

Need for providing Depreciation :

1) To ascertain the profits
2) To show the assets at their proper value
3) To create funds for replacement of assets
4) Provision of depreciation is a statutory need u/s 205 of the Indian Companies Act, 1956.
5) To spread over the cost of the fixed asset
6) To show correct financial position
7) To compute tax liability
8) To determine product cost for managerial decision making

Distinction between depreciation, depletion and amortization :

Depreciation is calculated on fixed, physical and tangible assets.
Depletion refers to the physical exhaustion of natural resources
Amortization refers to writing -off of long term assets or intangible assets. Such as leaseholds, copy rights, etc.

Causes of Depreciation :

1) Physical deterioration (wear & tear) (erosion, rust, rot and decay)
2) Economic factors (obsolescence & inadequacy)
3) Time factors – (eg. Intangible fixed assets such as patent rights)
4) Depletion

Computation of Depreciation :

1) Depreciation base
2) Useful/Economic life
3) Depreciation method

Methods of Depreication :

1) Fixed installment or Straight line method
2) Diminishing balance or Written down value method
3) Sum of digits method

4) Annuity method
5) Depreciation fund/Sinking fund method
6) Insurance policy method
7) Revaluation method
8) Activity method (i) Production unit method (ii) Machine Hour rate method (iii) Service unit (hrs) method (iv) Depletion's method.

Illustration

1. A van was bought for Rs.1,86,000 on 1st Jan 2002. Extra partitions and a new counter were fitted to make use of it as a traveling shop. The additional cost was Rs.18,000. Repairs during the year amounted to Rs.2,000. The van was depreciated on its capital cost @ 15%. Pa. show the asset account on 31st Dec 2002

Solution:

Van account

Date	Particulars	Amount	Date	Particulars	Amount
1st Jan 2002	To Bank (1,86,000 + 18,000)	2,04,000	31st Dec 2002	By Dep @ 15% By Bal.c/d	30,600 1,73,400
		2,04,000			**2,04,000**

10. INTANGIBLE ASSETS

Intangible assets refers to those assets which cannot be seen or touched, such as goodwill. They do not generate goods or services directly. They reflect the rights of the firm and includes patent rights, copy rights, trade marks and goodwill.

SUMMARY

The financial accounting has evolved over the no of years into a specialized profession. The process of accounting starts with recording in the Journal, preparing ledger accounts, prepare trial balance and final accounts and at the end of this process, the financial statements are circulated to the stakeholders and shareholders. Proper pricing and valuation of inventory and adoption and maintenance of sound depreciation policy also contribute to maximize the earnings of the concern.

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Sales revenue is regarded as earned if the following conditions are satisfied. – i) The seller has passed the legal ownership of the goods to the buyer, ii) The selling price of the goods has been established, iii) The buyer has paid the purchase price of the goods or it is certain that he will pay the price. If any of these conditions are not fulfilled revenue cannot be recorded.

The term inventory include stock of (i) finished goods (ii) work-in-progress and (iii) raw materials and components. In case of a trading concern, inventory primarily consists of finished goods while in case of a manufacturing concern, inventory consists of raw materials, components, stores, work-in-process and finished goods.

There are two main objectives to inventory valuation. They are – i) Determination of income, ii) Determination of financial position

There are two inventory systems. They are – i) periodic inventory system and ii) Perpetual inventory system.

The various methods of valuation of inventories or pricing issues of material are – i) Specific identification method , ii) FIFO, iii) LIFO, iv) HIFO, v) Base Stock Method, vi) Next In First Out (NIFO), vii) Weighted Average Price Method

Depreciation is a permanent, continuing and gradual shrinkage in the book value of a fixed asset due to use, wear and tear, obsolescence or effluxion of time.

Short Questions

1. What is an accounting cycle?
2. Explain the meaning of the term ‘Journal’ and state its significance
3. What is a ledger?
4. What is a trial balance?
5. What are final accounts?
6. When sales revenue is recognized?
7. What do you mean by inventory valuation?
8. Define fixed assets
9. What is depreciation?
10. Distinguish between depreciation, depletion and amortisation
11. What are intangible assets?
12. Define budget and budgetary control
13. Explain the various objectives of depreciation.
14. Distinguish between a master budget and a functional budget

Long Questions

1. Define financial accounting. Explain the process of accounting cycle in depth with an illustration
2. Mention the various adjustments to be made while preparing the final accounts
3. What is inventory? Explain the various methods of issuing material issues
4. Define depreciation. What are the various methods of calculating depreciation?
5. Explain the concept of budgeting and budgetary control. What are the essentials of an effective budgetary control system?
6. Explain the concept of budgetary control. What are its merits and demerits. How do you classify budgets?

Exercises

1. The following are the balances extracted from Nalan on 31-12-1998

	Rs.
Capital	30,000
Drawings	5,000
Furniture & Fittngs	2,600
Bank Overdraft	4,200
Creditors	13,800
Business Premises	20,000
Sales Returns	2,000
Discounts (Debtors)	1,600
Discounts (Creditors)	2,000
Taxes & Insurance	2,000

Stock on 1-1-1998	22,000
Debtors	18,000
Rent from tenants	1,000
Purchases	1,10,000
Sales	1,50,000
General expenses	4,000
Salaries	9,000
Commission (Debtors)	2,200
Carriage on purchases	1,800
Bad debts written off	800

Adjustments

(1) Stock on hand 31-12-1998 : Rs. 20,060
(2) Write off depreciation Business premises : Rs. 300, Furniture & fittings : Rs. 250
(3) Make provision for 5% on debtors for doubtful debts.
(4) Allow interest on capital at 5%.
(5) Carry forward Rs. 200 for unexpired insurance.

2. From the following Trial Balance of KRISHNAN as at 31-12-1987, you are required to prepare a Trading, Profit and Loss account for the year ended 31-12-1987 and Balance Sheet as at that date after making necessary adjustments.

	Rs.	Rs.
Capital		80,000
Drawings	6,000	
Plant & Machinery (Balance on 1-1-87)	20,000	
Plant & Machinery (Additional on 1-7-87)	5,000	
Stock on 1-1-87	15,000	
Purchases	82,000	
Returns Inwards	1,000	
Sundry debtors	20,000	
Furniture & Fixtures	5,000	
Freight & Duty	2,000	
Carriage Outwards	500	
Rent, Rates & taxes	4,600	
Printing & Stationery	800	
Trading expenses	400	
Sundry Creditors		10,000
Discounts		800
Sales		1,20,000
Return Outwards		2,000
Posting & telegraph	800	
Provision for debtors		400
Subrent for premises upto 30-6-87		1,200

Insurance charges	700	
Salaries & Wages	21,300	
Cash in hand	6,200	
Cash in Bank	20,500	
	2,13,400	2,13,400

Adjustments:

(1) Stock on 31-12-87 : Rs. 14,600
(2) Write off Rs. 600 as bad debts
(3) Provision for doubtful debts is to be maintained at 5% on debtors
(4) Create a provision for discount on debtors & reserves fro discount on creditors at 2%
(5) Provision for depreciation on Furniture and fixtures is at 5% per annum and Plant & Machinery at 20% per annum
(6) Insurance prepaid was Rs. 100

A fire occurred on 25th December 1987 in the godown and stock of the value of Rs. 5,000 was destroyed. It was fully insured and insurance company admitted the claim in full

3. the following Trial Balance of LOVMOON Ltd. And other particulars given, prepare Trading, Profit and Loss account and Balance Sheet for the year ended 31-12-1995.

	Rs.		Rs.
Prepaid expenses	1,000	Share Capital	10,00,000
Balance at Bank	1,76,000	Sundry Creditors	2,32,000
Motor Vehicles	1,48,000	Sales	31,60,000
Sundry Debtors	2,96,000	Provision for	
Printing & Stationery	6,600	doubtful debts	5,000
Purchases	24,00,000	General reserve	2,00,000
Opening Stock	2,40,000	Last Year P&L	
Bad debts	11,400	A/c Balance	1,24,000
Freehold premises			
At cost	8,00,000		
Repairs to premises	47,600		
Mgr.'s Remuneration	20,000		
Wages & Salaries	2,29,000		
Motor & Delivery exp.	99,000		
Administration exp.	1,31,400		
Rates & taxes	15,000		
Goodwill	1,00,000		
	47,21,000		47,21,000

Adjustment:

(1) Stock on hand 31-12-95 : Rs. 2,80,000
(2) Depreciation on Motor vehicles : Rs. 74,000
(3) Sundry creditors include a claim for damages : Rs. 20,000 made last year. This was settled during this year for Rs. 15,100
(4) Unpaid wages : Rs. 1,600
(5) Rates paid in advance : Rs. 3,000
(6) Provision for bad debts is to be reduced to Rs. 3,500
(7) The item of repairs to premises includes Rs. 20,000 for a new structure
(8) Stock of stationery on hand : Rs. 2,200

4. A company purchased a second hand machine on 1st Jan 2000 for Rs.37,000 and immediately spent Rs.2,000 on its repairs and Rs.1,000 on its installation. On 1st July 2001, it purchased another machine for Rs.10,000 and on 1st July 2002, it sold off the first machine purchased in 2000 at Rs.28,000. on the same date, it purchased machinery for Rs.25,000. The second machine purchased for Rs.10,000 was sold off on 1st July 2003 for Rs.2000.

Depreciation was annually on 31st December provided on machinery @ 10% on the original cost. In 2001, however, the co changed the method of providing depreciation and adopted the Written down value method, the rate of depreciation being 15%. Give the machinery account for the 4 years commencing from 1st January 2000.

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COST SHEET

Meaning And Scope of Cost Accountancy

The term cost accountancy is wider than the term cost accounting. According to the Terminology of Management and Financial Accountancy Published by the Chartered Institute of Management Accountants, London, cost accountancy means, "the application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control. It includes the presentation of information derived there from for the purpose of managerial decision making.

Cost Accounting

Cost accounting is the process of accounting for costs. It embraces the accounting procedures relating to recording of all income and expenditure and the preparation of periodical statements and reports with the object of ascertaining and controlling costs. It is thus the formal mechanism by means of which costs of products or services are ascertained and controlled.

Costing

Costing is "the technique and process of ascertaining costs." Cost accounting is different from costing in the sense that the former provides only the basis and information for ascertainment of cost. Once the information is made available the costing can be carried out arithmetically by means of memorandum statements or by method of integral accounting.

However, the two terms costing and cost accounting are often used interchangeably. No such distinction has also been observed for the purpose of this book. Wheldon has given an exhaustive definition of costing after expanding the ideas contained in the definitions of the terms 'costing and cost accounting'. According to him costing is, "the classifying recording and appropriate allocation of expenditure for the determination of the costs of products or services; the relation of these costs to sales values; and the ascertainment of profitability".

Cost Control

According to the Institute of Cost and Works Accountants of India, cost control means "The act of power of controlling or regulating or dominating or commanding costs through the application of management tools and techniques to the performance of any operation to most predetermined objectives of quality, quantity, value and time oat an optimum outlay”.

Objectives of Cost Accounting

The main objectives of cost accounting can be summarized as follows:-

1. **Ascertaining Costs:** - The first and foremost objective of cost accounting is to find out cost of a product, process or service. The other objectives which have been mentioned hereafter scan be achieved only when the costs have been ascertained.
2. **Determining Selling Price**: - Business enterprises are run on a profit – making basis. It is thus necessary that the revenue should be greater than the costs incurred in producing goods and services from which the revenue is to be derived. Cost accounting provides information regarding the cost to make and sell such products or services.
3. **Measuring and Increasing Efficiency**: - Cost accounting involvers a study of the various operations used in manufacturing a product or providing a services. The study facilitates measuring of the efficiency of the organisation as a whole as well as of the departments besides devising means of increasing the efficiency.
4. **Cost Control and Cost Reduction**: - Cost accounting assists in cost control it uses techniques such as budgetary control, standard costing etc. for controlling costs. Budgets are prepared will in advance. The standards for each item of cost are determined, the actual costs are compared with the standard costs and variances are found out as to their causes. This greatly increases the operating efficiency of the enterprise. Besides it, cost is required to be reduced also constant research and development activities help in reduction of costs without compromising with the quality of goods or services.
5. **Cost Management**: - The term ‘Cost Management’ includes the activities of managers in short-run and long-run planning and control of costs. Cost management has a broad focus. It includes both cost control and lost reduction. As a matter of fact cost management is often invariably linked with revenue and profit planning. For instance, to enhance revenue and profits, the management often deliberately incurs additional costs for advertising and product modifications.
6. **Ascertaining Profits:** - Cost accounting also aims at ascertaining the profits of each and every activity. It produces statements at such intervals as the management may require. The financial statements prepared under financial accounting, generally once a year or half – year, are spaced too far apart in time to meet the needs of the management. In order to operate the business at a high level of efficiency, it is essential for the management to have a frequent review of production, sales and operating results. Cost accounting provides

daily, weekly or monthly volumes of units produced, accumulated costs together with appropriate analysis so that quantum of profit and profitability is known.

7. **Providing Basis for Managerial Decision – Making**: - Costs accounting helps the management in formulation operative policies. These policies may relate to any of the following matters:-
   (i) Determination of cost – volume – profit relationship.
   (ii) Shutting down or operating at a loss.
   (iii) Making or buying from outside supplies.
   (iv) Continuing with the existing plant and machinery or replacing them by improved and economical means.

Cost Accounting Versus Financial Accounting

Accounting may broadly be classified into two categories:-

(a) Financial Accounting and
(b) Management Accounting

Financial Accounting is concerned with recording, classifying and summarizing financial transactions and preparing statements relating to the business in accordance with generally accepted accounting concepts and conventions. It is mainly meant to serve all parties external to the operating responsibility of the firm such as shareholders and creditors of the firm besides providing information about the overall operational results of the business while management accounting is concerned with accounting information which is useful for the management it is the presentation of accounting information in such as way as to assist "the management in the creation of policy and day to day operation of the undertaking.

IMPORTANCE OF COST ACCOUNTING

1. Costing helps in periods of trade depression and trade competition:-

In periods of trade depression the business cannot afford to have leakages which pass unchecked. The management should know where economies may be sought, waste eliminated and efficiency increased. The business has to wage a wax for its survival. The management should know the actual cost of their products before embarking on any scheme of reducing the prices on giving tenders. Adequate costing facilitates this.

2. Aids in price fixation:-

Though economic law & supply and demand and activities of the competitors, to a great extent, determine the price of the article, cost to the producer does play an important part. The producer can take necessary guidance from his costing records.

3. **Helps in estimate:-**
Adequate costing records provide a reliable basis upon which tenders and estimates may be prepared. The chances of losing a contract on account of over – rating or losing in the execution of a contract due to under – rating can be minimized. Thus, “ascertained costs provide a measure for estimates, a guide to policy, and a control over current production”.

4. **Helps in channeling production on right lines:-**
Costing makes possible for the management to distinguish between profitable and non-profitable activities profit can be maximized by concentrating on profitable operations and eliminating non-profitable ones.

5. **Wastages are eliminated:-**
As it is possible to know the cost of the article at every stage, it becomes possible to chock various forms of waste, such as time, expenses etc. or in the use of machine, equipment and tools.

6. **Costing makes comparison possible:-**
If the costing records are regularly kept, comparative cost data for different periods and various volumes of production will be available. It will help the management in forming future lines of action.

7. **Provides data for periodical profit and loss accounts:-**
Adequate costing records supply to the management such data as may be necessary for preparation of profit and loss account and balance sheet, at such intervals as may be desired by the management.
It also explains in detail the sources of profit or loss revealed by the financial accounts thus helps in presentation of better information before the management.

8. **Aids in determining and enhancing efficiency**:-
Losses due to wastage of material, idle time of workers, poor supervision etc., will be disclosed if the various operations involved in manufacturing a product are studied by a cost accountant. The efficiency can be measured and costs controlled and through it various devices can be framed to increase the efficiency.

9. **Helps in inventory control:-**
Costing furnishes control which management requires in respect of stock of materials, work-in-progress and finished goods. (This has been explained in detail under the chapter “Materials”)

10. **Helps in cost reduction:-**

Costs can be reduced in the long run when alternatives are tried. This is particularly important ion the present day context of global competition cost accounting has assumed special significance beyond cost control this way.

11. **Assists in increasing productivity**

Productivity of material and labour is required to be increased to have growth and more profitability in the organisation costing renders great assistance in measuring productivity and suggesting ways to improve it.

ELEMENTS OF COST

There are three broad elements of cost:-

(a) Material
(b) Labour
(c) Expenses

(a) Material: - The substance from which the product is made is known as material. It may be in a raw or a manufactured state. It can be direct as well as indirect.

Direct Material: - All material which becomes an integral part of the finished product and which can be conveniently assigned to specific physical units is termed as "Direct Material".
Following are some of the examples of direct material:-

(i) All material or components specifically purchased produced or requisitioned from stores.
(ii) Primary packing material (e.g. – cartoon, wrapping, cardboard, boxes etc.)
(iii) Purchased or partly produced components.

Direct material is also described as raw-material, process material, prime material, production material, stores material, constructional material etc.

Indirect Material: - All material which is used for purposes ancillary to the business and which cannot be conveniently assigned to specific physical units is termed as "Indirect Material".

Consumable stores, oil and waste, printing and stationery etc. are a few examples of indirect material
Indirect material may be used in the factory the office or the selling and distribution division.

(b) Labour: - For conversion of materials into finished goods, human effort is needed such human effort is called labour. Labour can be direct as well as indirect.

Direct labour: - Labour which takes an active and direct part in the production of a particular commodity is called labour. Direct labour costs are, therefore specially and conveniently traceable to specific products.
Direct labour is also described as process labour, productive labour, operating labour, manufacturing labour, direct wages etc.

Indirect labour:- labour employed for the purpose of carrying out tasks incidental to goods or services provided, is indirect labour such labour does not alter the construction, composition or condition of the product. It cannot be practically traced to specific units of output wages of store – keepers, foreman, time – keepers, directors, fees, salaries of salesmen, etc. are all examples of indirect labour costs.
Indirect labour may relate to the factory the office or the selling and distribution division.

(c) Expenses: - Expenses may be direct or indirect.

Direct expenses: - These are expenses which can be directly, conveniently and wholly allocated to specific cost centers or cost units. Examples of such expenses are: hire of some special machinery required for a particular contract, cost of defective work incurred in connection with a particular job or contract etc.
Direct expenses are sometimes also described as "chargeable expenses".

Indirect expenses:- these are expenses which cannot be directly, conveniently and wholly allocated to cost centers or cost units.

OVERHEADS:- It is to be noted that the term overheads has a wider meaning than the term indirect expenses overheads include the cost of indirect material, indirect labour besides indirect expenses.

Indirect expenses may be classified under the following three categories:-

(a) Manufacturing (works, factory or production) expenses:-
Such indirect expenses which are incurred in the factory and concerned with the running of the factory or plant are known as manufacturing expenses. Expenses relating to production management and administration are included there in. Following are a few items of such expenses:
Rent, rates and insurance of factory premises, power used in factory building, plant and machinery etc.

(b) Office and Administrative expenses

These expenses are not related to factory but they pertain to the management and administration of business such expenses are incurred on the direction and control of an undertaking example are :- office rent, lighting and heating, postage and telegrams, telephones and other charges; depreciation of office building, furniture and equipment, bank charges, legal charges, audit fee etc.

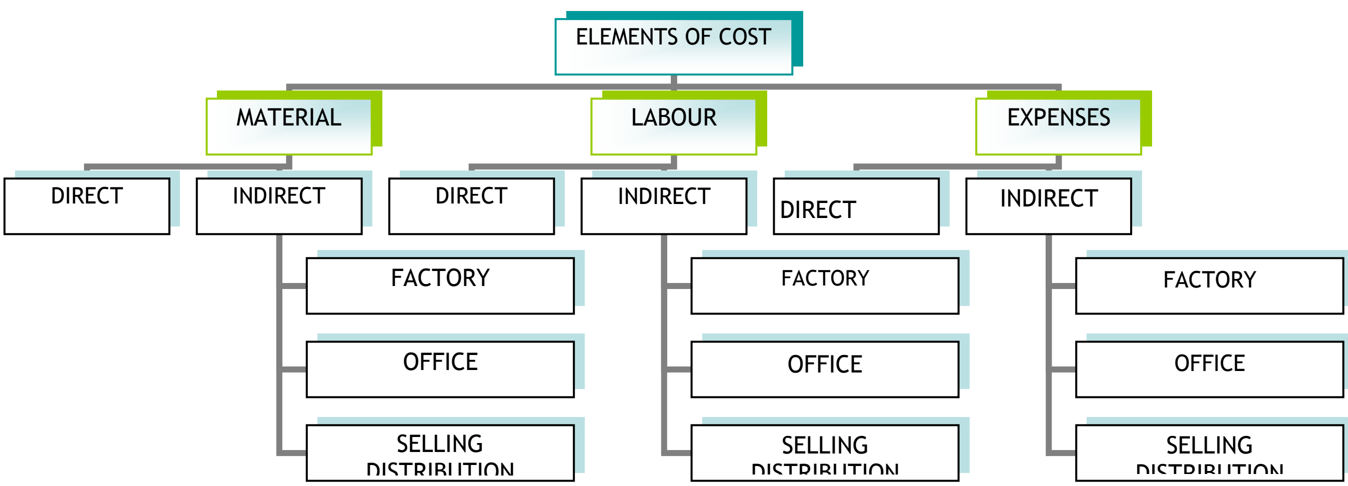
(c) Selling and Distribution Expenses:-

Expenses incurred for marketing of a commodity, for securing orders for the articles, dispatching goods sold, and for making efforts to find and retain customers are called selling and distribution expenses examples are:-

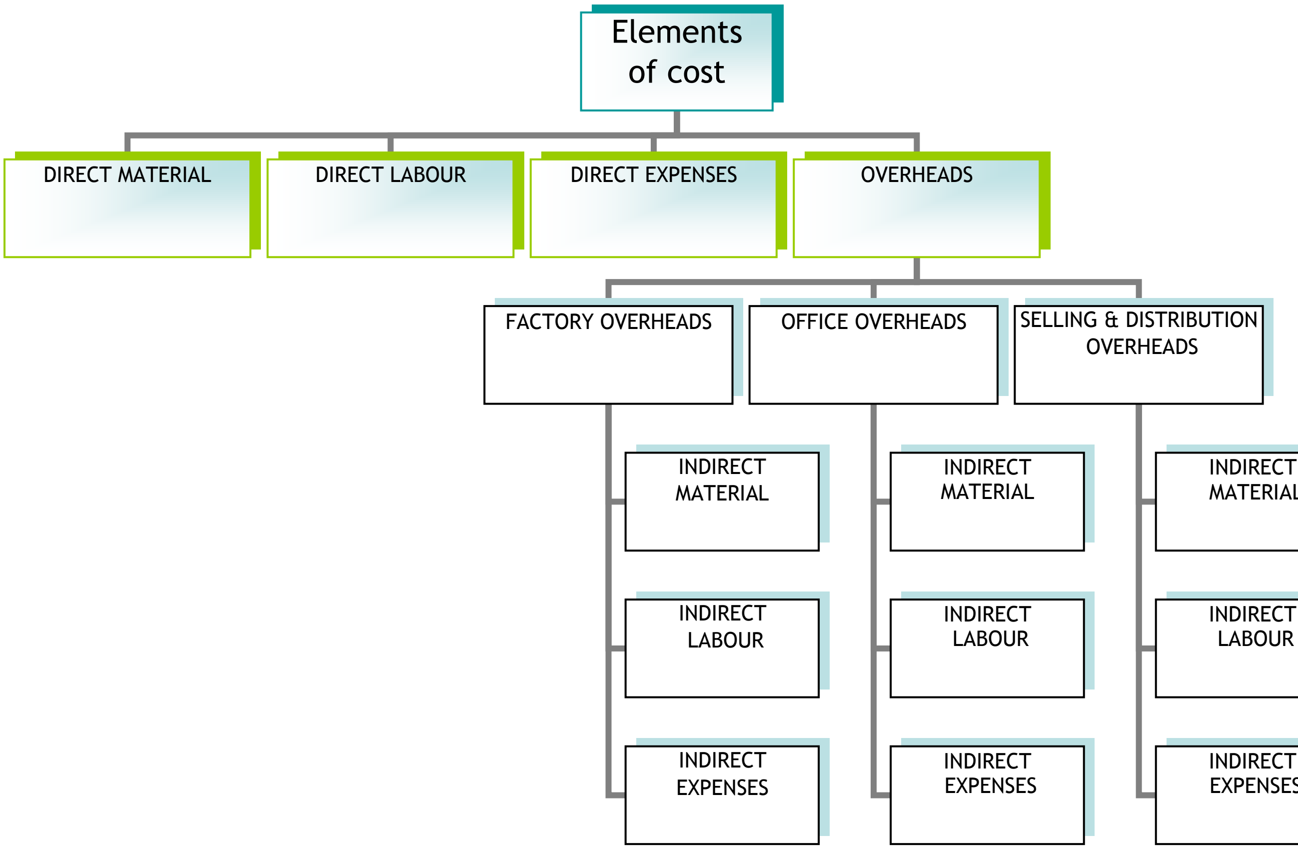
Advertisement expenses cost of preparing tenders, traveling expenses, bad debts, collection charges etc.

Warehouse charges packing and loading charges, carriage outwards, etc.

The above classification of different elements of cost can be presented in the form of the following chart:



OR


Elements of cost
DIRECT MATERIAL
DIRECT LABOUR
DIRECT EXPENSES
OVERHEADS
FACTORY OVERHEADS
OFFICE OVERHEADS
SELLING & DISTRIBUTION OVERHEADS
INDIRECT MATERIAL
INDIRECT LABOUR
INDIRECT EXPENSES
INDIRECT MATERIAL
INDIRECT LABOUR
INDIRECT EXPENSES
INDIRECT MATERIAL
INDIRECT LABOUR
INDIRECT EXPENSES

Items excluded from cost accounts

There are certain items which are included in financial accounts but not in cost accounts. These items fall into three categories:-

Appropriation of profits

(i) Appropriation to sinking funds.
(ii) Dividends paid
(iii) Taxes on income and profits
(iv) Transfers to general reserves
(v) Excess provision for depreciation of buildings, plant etc. and for bad debts
(vi) Amount written off – goodwill, preliminary expenses, underwriting commission, discount on debentures issued; expenses of capital issue etc.
(vii) Capital expenditures specifically charged to revenue
(viii) Charitable donation

Matters of pure finance

(a) Purely financial charges:-

(i) Losses on sale of investments, buildings, etc.
(ii) Expenses on transfer of company's office
(iii) Interest on bank loan, debentures, mortgages, etc.
(iv) Damages payable
(v) Penalties and fines
(vi) Losses due to scrapping of machinery
(vii) Remuneration paid to the proprietor in excess of a fair reward for services rendered.

(b) Purely financial incomes:-

(i) Interest received on bank deposits
(ii) Profits made on the sale of investments, fixed assets, etc.
(iii) Transfer fees received
(iv) Rent receivable
(v) Interest, dividends, etc. received on investments.
(vi) Brokerage received
(vii) Discount, commission received

Abnormal gains and losses:-

(i) Losses or gains on sale of fixed assets.
(ii) Loss to business property on account of theft, fire or other natural calamities.

In addition to above abnormal items (gain and losses) may also be excluded from cost accounts. Alternatively, these may be taken to costing profit and loss account.

Components of total cost

Prime cost: - It consists of costs of direct material, direct labour and direct expenses. It is also known as basic, first or flat cost.

Factory cost:- It comprises of prime cost and in addition works of factory overheads which includes costs of indirect material, indirect labour and indirect expenses of the factory. The cost is also known as works cost, production or manufacturing cost.

Office cost: - If office and administrative overheads are added to factory cost office cost is arrived at this is also termed as administrative cost or the total cost of production.

Total cost:- Office cost or total cost of production selling and distribution overheads are added to the total cost of production to get the total cost or the cost of sales.
Cost of sales or total cost. The various components of total cost can be depicted through the help of the following chart:-

Components of Total cost

Direct material plus
Direct labour plus Prime cost or Direct cost or First cost
Direct expenses

Prime cost plus works cost or factory or production cost or
manufacturing Works overheads cost

Work cost plus office and
Administrative overheads

Office cost plus selling
And distribution overheads

Adjustments for inventories

The following adjustments may have to be made for inventories of raw materials, work – in – progress and finished goods while computing the different components of cost:

(i) Direct Material Consumed	=	Opening stock of Direct material	+	Purchases of Direct material	-	Closing stock of Direct material
(ii) Works Cost	Gross = cost	works	+	Opening work - in – progress	__	Closing work – in progress

(iii) Cost of production = cost of production + Opening stock Closing stock
of goods sold of finished _ of finished good

Particular	Details (Rs)	Amount (Rs)
Raw material purchased		
Add:- Opening stock of raw material		

Raw material for consumption		
Less:- closing stock of raw material		

Raw material consumed		
Less:- Sale of wastage of materials		

Add:- Direct labour		
Add:- Direct chargeable expenses		

Prime cost		
Add:- Factory overhead		
Rent & Taxes		
Factory Power		
Experimental charges		

Factory cost		
Add:- Administrative overhead:-		
Office management salary		
Office printing & stationery		

Cost of production		
Add:- Opening stock of finished goods		

Goods available for sales		
Less:- closing stock of finished goods		

Cost of goods sold		
Add:- selling and distribution overhead:-		
Salaries of salesman		
Commission to traveling agent		

Cost of sales		
Profit		

Sales		

Illustration 1. Calculate prime cost from the following information:-

Direct material - Rs. 40,000, Direct labour - Rs. 30,000 Direct expenses - Rs. 25.000

Solution: Prime cost = Direct Material + Direct labour + Direct expenses
= Rs. 40,000 + Rs.30, 000 + Rs. 25,000
= Rs. 95,000

Illustration 2. Calculate prime cost from the following information:-
Opening stock of raw material = Rs. 12,500
Purchased raw material = Rs. 75,000
Expenses incurred on raw material = Rs. 5,000
Closing stock of raw material = Rs. 22,500
Wages Rs. 47,600 Direct expenses Rs. 23,400

Solution: - Calculation of raw material consumed:-
Raw material consumed = Opening stock of material + purchases of Raw material + expenses incurred on raw material - closing stock of raw material

= Rs 12,500 + Rs 75,000 + Rs 5,000 – Rs 22,500
= Rs. 92,500 – Rs 22,500
= Rs. 70,000

Prime cost = Raw material consumed + Direct labour + Direct expenses
= Rs 70,000 + Rs 47,600 + Rs 23,400
= Rs 1, 41,000

OR

It can be shown in vertical form such as cost sheet

Particular	**Details (Rs)**	**Amount (Rs)**
Opening stock of raw material	12,500	
Add:- Purchase	7,500	
Add:- Expenses incurred on purchases	5,000	

Raw material available	92,500	
Less :- closing stock of raw material	22,500	

Raw material consumed		70,000
Add:- Direct wages or labour		47,600
Add:- Direct expenses		23,400

Prime cost		1,41,000

Illustration 3. Calculate works cost or factory cost from the following details:-

Raw material consumed	= Rs 50,000
Direct wages	= Rs20, 000
Direct expenses	= Rs 10,000
Factory expenses 80% of direct wages	
Opening stock of work in progress	= Rs 15,000
Closing stock of work in progress	= Rs 21,000

Solution: - Calculation of factory cost

Particular	Amount (Rs)	Amount (Rs)
Direct material consumed	50,000	
Add:- Direct wages	20,000	
Add:- Direct Expenses	10,000	

Prime cost		80,000
Add:- Factory expenses		16,000

Current manufacturing cost		96,000
Add:- Opening stock of work in progress		15,000

Total goods processed during the period		1,11,000
Less:- Closing sock of work in progress		21,000

Factory cost or work cost		90,000

Illustration 4. Calculate cost of production from the following information:-

Raw material purchased	= Rs 42,500
Freight paid	= Rs 5,000
Labour charges	= Rs 12,500
Direct expenses	= Rs 10,000

Factory overhead 80% of Direct labour charges
Administrative overhead = 10% of work cost

	Opening stock	Closing stock
Raw material	8,000	10,000
Work in progress	7,500	9,000

Solution: - Calculation of cost of production:-

Particular	**Amount (Rs)**	**Amount (Rs)**
Material purchased	42,500	
Add:- freight	5,000	

Total cost of material purchased	47,500	
Add:- Opening stock of Raw material	8,000	

Material available for consumption	55,500	
Less:- Closing stock of Raw material	10,000	

Raw material consumed	45,500	
Add:- Direct labour charges	12,500	
Add:- Direct expenses	10,000	
Prime cost		68,000
Add:- Factory overhead		10,000

Current manufacturing cost		78,000
Add:- Opening stock of work in progress		7,500

Total goods processed during the period		85,500
Less:- Closing stock of work in progress		9,000

Factory cost		76,500
Add:- Administrative overhead		7,650

Cost of production		84,150

Illustration 5. Prepare cost sheet from the following particular in the book of B. M. Rehman

Raw material purchased = Rs. 1, 20,000
Paid freight charges = Rs 10,000
Wages paid to laborers = Rs 35,000
Directly chargeable expenses = Rs 25,000
Factory on cost = 20% of prime cost

General and administrative expenses = 4% of factory cost
Selling and distribution expenses = 5% of production cost
Profit 20% on sales

	Opening stock	Closing stock
Raw material	15,000	20,000
Work in progress	17,500	24,000
Finished goods	20,000	27,500

Solution:-

Book of B. M. Rehman

Cost sheet

Raw material purchased	1,20,000
Add:- freight charges	10,000

Total cost of raw material purchased	1,30,000
Add:- opening stock of raw material	15,000

Cash of raw material available	1,45,000
Less:- closing stock of raw material	20,000

Raw material consumed	1,25,000
Add:- wages paid to labours	35,000
Add:- Directly chargeable expenses	25,000

Prime cost	1,85,000
Add:- Factory overhead 20% of prime cost	37,000
Current manufacturing cost	2,22,000
Add:- Opening stock of work in progress	17,500
Total goods processed during the period	2,39,500
Less:- closing stock of work in progress	24,000
Factory on work cost	2,15,500
Add:- General & administrative expenses 4% of factory cost	8,620
Cost of production	2,24,120
Add:- opening stock of finished goods	20,000
Goods available for sales	2,44,120
Less:- closing stock of finished goods	27,500
Cost of goods sold	2,16,620
Add:- selling and distribution expenses 5% of production cost	11,206
Cost of sales	2,27,826
Add:- Profit	56,956.50
Sales	2,84,782.50

Illustration 6. Prepare cost sheet in the book of M. B. Rehman from the following particulars.

Opening stock: -	Raw material	=	Rs 5,000
	Finished goods	=	Rs 4,000
Closing stock: -	Raw material	=	Rs 4,000
	Finished goods	=	Rs 5,000
	Raw material purchased	=	Rs 50,000
	Wages paid to laboures	=	Rs 20,000
	Chargeable expenses	=	Rs 2,000
	Rent and Taxes	=	Rs 7,400
	Power	=	Rs 3,000
	Experimental expenses	=	Rs 600
	Sale of wastage of material	=	Rs 200
	Office management salary	=	Rs 4,000
	Office printing & stationery	=	Rs 200
	Salaries to salesman	=	Rs 2,000
	Commission to traveling agents	=	Rs 1,000

Sales = Rs 1, 00,000

Solution:-

Book of B. M. Rehman

Cost sheet

Particular	Details (Rs)	Amount (Rs)
Raw material purchased	50,000	
Add:- Opening stock of raw material	5,000	

Raw material for consumption	55,000	
Less:- closing stock of raw material	4,000	

Raw material consumed	51,000	
Less:- Sale of wastage of materials	200	
	-------------	50,800
Add:- Direct labour		20,000
Add:- Direct chargeable expenses		2,000

Prime cost		72,800
Add:- Factory overhead		
Rent & Taxes	7,400	
Power	3,000	
Experimental charges	600	
	--------------	11,000
Factory cost		83,800
Add:- Administrative overhead:-		
Office management salary	4,000	
Office printing & stationery	200	
	---------------	4,200
Cost of production		88,000
Add:- Opening stock of finished goods		4,000

Goods available for sales		92,000
Less:- closing stock of finished goods		5,000

Cost of goods sold		87,000
Add:- selling and distribution overhead:-		
Salaries of salesman	2,000	
Commission to traveling agent	1,000	
	--------------	3,000
Cost of sales		90,000
Profit		10,000

Sales		-------------- 1,00,000

Illustration 7. The cost of sale of production 'A' is made up as follows:-

Material used in manufacturing	Rs 5,500
Material used in packing material	Rs 1,000
Material used in selling the product	Rs 150
Material used in the factory	Rs 175
Material used in the office	Rs 125
Labour required in production	Rs 1,000
Labour required for supervision in factory	Rs 200
Expenses direct factory	Rs 500
Expenses indirect factory	Rs 100
Expenses office	Rs 125
Depreciation of office building	Rs 75
Depreciation on factory plant	Rs 175
Selling expenses	Rs 350
Freight on material	Rs 500
Advertising	Rs 125

Assuming that all products manufactured and sold, what should be the selling price be fixed to obtain a profit of 20% on selling price.

Solution

Cost Sheet

Particular	**Amount (Rs)**	**Amount (Rs)**	**Amount (Rs)**
Direct material:-			
Material used in manufacturing		5,500	
Material used in Packing material		1,000	
Freight on material		500	
		-------------	7,000
Direct wages:-			
labour require in production			1,000
Direct expenses:- Direct factory			500

Prime cost			8,500
Add:- Factory overhead			
Indirect material used in factory		75	
Indirect labour required for supervision		200	
Indirect factory expenses	100		
Depreciation factory	175		
	-------------	275	

		-------------	550
Factory on works cost			9050
Add:- office & administrative expenses			
Indirect material		125	
Indirect expenses office	125		
Indirect depreciation	75		
	------------	200	
		-------------	325
Total cost of production			9375
Add:- selling and distribution overhead:-			
Indirect material		150	
Indirect expenses	350		
Advertisement	125		
	------------	475	
		-------------	625
Cost of sales			10,000
Profit			2,500

Sales			12,500

Illustration 8.

Prepare a statement of cost from the following trading and P/L account for the year ending March 31, 2008

Particular	Amount (Rs)	Particular	Amount (Rs)
To opening stock material	12,000	By sales	2,00,000
Finished goods	40,000	By closing stock material	20,000
To purchases	1,20,000	Finished goods	50,000
To cost of moulds	3,000		
To salary of factory manger	1,000		
To depreciation of machine	800		
To gross profit	63,200		
	-------------		--------------
	2,70,000		2,70,000
	-------------		-------------
To office salary	9,000	By Gross profit	63,200
To salesman salary	6,000	By interest from bank	800
To insurance of office building	1,000	By dividend received	200
To godown expenses	800	By rent received	900
To directors fees	2,000		

To telephone charges	700		
To showroom expenses	1,200		
To delivery van expenses	1,500		
To preliminary expenses	2,000		
To interest on deb.	700		
To market research exp.	600		
To net profit	39,000		
	--------------		--------------
	65,100		65,100
	--------------		--------------

Solution

Statement of cost
(For the year ending 31st March 2008)

Particular	**Details (Rs)**	**Amount (Rs)**
Direct material:-		
Raw material purchased	1,20,000	
Add:- opening stock of raw materials	12,000	

Raw material for consumption	1,32,000	
Less:- Closing sock of raw materials	20,000	

Raw material consumed	1,12,000	
Add:- Direct labour	30,000	

Prime cost		1,42,000
Add:- Factory overhead:-		
Cost of moulds	3,000	
Factory manager salary	1,000	
Depreciation on machinery	800	
	--------------	4,800

Factory cost		1,46,800
Add:- office and administrate overhead		
Salary	9,000	
Insurance	1,000	
Directors fees	2,000	
Telephone charges	700	
	--------------	12,700

Cost of production		1,59,500
Add:- Opening stock of finished goods		40,000

Goods available for sales		1,99,500
Less:- Closing stock of finished goods		50,000

Cost of goods sold		1,49,500

Add:- selling & distribution ext:-		
Salesman's salary	6,000	
Insurance (godown)	800	
Showroom expenses	1,200	
Expenses of delivery van	1,500	
Market research expenses	600	
	------------	10,100

Cost of sales		1,59,600
Profit		40,400

Sales		2,00,000

Illustration 9.

The following inventory data relate to Nazia Ltd.

Inventories

	Opening	Closing
Finish goods	Rs 1,100	Rs 950
Work in progress	Rs 700	Rs 800
Raw materials	Rs 900	Rs 950

Additional information:-

Cost of goods available for sales = Rs 6840
Total goods processed during the period = Rs 6540
Factory on cost = Rs 1670
Direct material used = Rs 1930

Requirements:-

(i) determine raw material purchase
(ii) determine the direct labour and cost incurred
(iii) determine the cost of goods sold

Solution

(i) Raw material purchased:-

Raw material consumed = opening stock + purchases – closing stock

OR Rs 1,930 = Rs 900 + Purchases – Rs 950

OR Rs 1,930 + Rs 50 = purchases

Rs 1,980 = Raw material purchased

(ii) Direct labour cost:-

Cost of goods processed during the year = Rs 6,540

Less: - Opening work in progress = Rs 700

	Rs 5,840
Less: - Factory overheads	= Rs 1,670

Prime cost	= Rs 4,170
Less: - Raw material consumed	= Rs 1930

Direct labour cost	= Rs 2,240

(iii) Cost of goods sold:-
= cost of goods available for sales – closing stock finished goods
= 6840 – 950 = Rs 5890

Illustration 10.

Mr. Zia furnishes the following data related to the manufacture of a standard product during the month of August 2008

Raw material consumed	-	Rs 15,000
Direct labour	-	Rs 5,000
Machine hours worked	-	Rs 900
Machine hour rate	-	Rs 5
Administration overheads	=	20% of works cost
Selling overheads	-	Rs 0.50 per unit
Unit produced	-	Rs 17,100
Unit sold	-	16,000 @ Rs 4 per unit

You are required to prepare a cost sheet from the above showing:-
(a) The cost per unit
(b) Cost per unit sold and profit for the period

Solution

Book of Zia
Cost sheet
(For the month of August 31, 2008)

Particular	Amount (Rs)	Amount (Rs)
Direct material consumed	15,000	0.878
Direct labour	5,000	0.292
Direct expenses	4,000	0.233
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Prime cost	24,000	1.403
Factory overheads (900 hours @ Rs 5 per hour)	4,500	0.263
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Work cost	28,500	1.666
Administrative overheads @ 20% of works cost	5,700	0.333
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Cost of production Less:- closing stock on August 31, 2008 (1100 units @ Rs 2 per unit)	34,200 2,200	2,000 -----
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Cost of goods sold Selling overheads @ Rs 0.50 per unit for 16000	32,000 8,000	2.000 0.50
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Cost of sales Profit	40,000 24,000	2.50 1.50
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Sales (1600 unit)	64,000	4.00

* Closing stock = unit produced - units sold
= 17100-16000
= 1100 units

Exercise Questions.

Theoretical Questions:-

1) Explain the meaning of cost accountancy
2) Define
    a) Direct materials
    b) Direct wages
    c) Direct expenses

3) What is cost accounting? Discuss briefly its important functions in a business firm
4) Explain the important objectives of cost accounting?
5) Distinguish between:-
    a) Direct expenses and indirect expenses?
    b) Direct labour and indirect labour?
    c) Direct materials and indirect materials?
6) Distinguish between ‘costing’ and ‘cost accounting’
7) What is financial accounting? How it is different from cost-accounting?
8) Mention the elements of cost
9) Explain the classification of direct labour
10) How the overheads are different from the expenses?
11) State at least five each type of overheads
    a) Factory overheads
    b) Administrative overheads
    c) Selling and distribution overheads

12) What are the components of direct cost?
13) Write the formula of calculating the raw material consumed
14) Explain the meaning of cost of goods sold and cost of sales
15) Explain the meaning of
    a) First cost
    b) Works cost and works on cost
    c) Cost of production and goods available for sales

Practical problems **(Short Answers)**

1. Opening stock of raw material - Rs 15,000
   Closing stock of raw material - Rs 20,000
   Material purchased - Rs 1, 20,000
   Find raw material consumed
   (Ans. 1, 15,000)

2. Raw material consumed - Rs 1, 02,000
   Raw material for consumption - Rs 1, 10,000
   Raw material purchased - Rs 1, 00,000
   Find opening & closing stock of raw material (Ans. Rs 10,000 and Rs 8,000)

3. Prime cost - Rs 1, 85,000
   Current manufacturing cost - Rs 2, 22,000
   Total goods processed during the period - Rs 2, 39,500
   Works cost - Rs 2, 15,000
   Find factory overheads, opening and closing stock of work in progress
   (Ans. Rs 37,000, Rs 17,500 and Rs 24,000)

4. Cost of production - Rs 11,206
   Goods available for sales - Rs 12,206
   Cost of goods sold - Rs 10,831
   Cost of Sales - Rs 11, 391
   Sales - Rs 12,000
   Find opening and closing stock of finished goods, selling expenses and profit or loss (Ans. Rs 1,000, Rs 1,375, Rs 560 and Rs 609 profit)

5. Direct material consumed - Rs 60,000
   Direct labour 50% of material consumed
   Direct expenses - $33^{1}/_{3}$% of direct labour
   Factory overheads - 40% of direct labour
   Office overheads - on cost $66^{2}/_{3}$% of works
   Find office cost (Ans. Rs 1, 20,000)

PRACTICAL PROBLEMS

1. From the following particulars prepare a cost sheet showing the total cost per tone for the period ended 31st December 1998

	Rs		Rs
Raw material	33,000	Director's fees (office)	2,000
Productive wages	35,000	Factory cleaning	500
Direct expenses	3,000	Sundry office expenses	200
Unproductive wages	10,500	Estimating	800
Factory rent and terms	7,500	Factory stationery	750
Factory lighting	2,200	Office stationery	900
Factory heating	1,500	Factory insurance	1,100
Motive power	4,400	Office insurance	500
Haulage	3,000	Legal expenses	400
Director's fees (works)	1,000	Rent of warehouse	300
Depreciation of		Unkeeping of delivery vans	700
- plant and machinery	2,000	Bank charges	50
- office building	1,000	Commission on sales	1,500
- delivery vans	200	Loose tools written off	600
Bad debts	100	Rent and taxes (office)	500
Advertising	300	Water supply	1,200
Sales department salaries	1,500		

The total output for the period has been 10,000 tones.

(Ans. Prime cost Rs 71,000 works cost Rs 1,08,050 office cost Rs 1,13,600 total cost Rs 1,18,200 cost per tone Rs 11.82)

2. Prepare a cost sheet to show the total cost of production and cost per unit of goods manufactured by a company for the month of July 1994. Also find out the cost of sales.

	Rs		Rs
Stock of raw materials 1-7-1994	3,000	Factory rent & rates	3,000
Raw materials purchased	28,000	Office rent	500
Stock of raw materials 31-7-1994	4,500	General expenses	400
Manufacturing wages	7,000	Discount on sales	300
Depreciation on plant	1,500	Advertisement	600
Loss on sale of a part of plant	300	Expenses to be charged fully income tax paid	2,000

The number of units produced during July 1994 was 3,000
The stock of finished goods was 200 and 400 units on 1-7-1994 and 31-7-1994 respectively. The total cost of units on hand on 1-7-1994 was Rs 2,800. All these had been sold during the month.

(Ans. Prime cost Rs 33,500 factory cost Rs 38,000 cost of production Rs 38,900 cost of sales Rs 37416)

3. The following particulars relating to the year 1994 have been taken from the books of a chemical works manufacturing and selling a chemical mixture:

	Rs	Rs
Stock on 1st Jan. 1994		
Raw materials	2,000	2,000
Finished mixture	500	1,750
Factory stores	------	7,250
Purchases		
Raw materials	1,60,000	1,80,000
Factory stores	------	24,250
Sales		
Finished mixture	1,53,050	9,18,000
Factory scrap	------	8,170
Factory wages	------	1,78,650
Power	------	30,400
Depreciation of machinery	------	18,000
Salaries		
Factory	------	72,220
Office	------	37,220
Selling	------	41,500
Expenses		
Direct	------	18,500
Office	------	18,200
Selling	------	18,000
Stock on 31st December 1994		
Raw material	1,200	
Finished mixture	450	
Factory stores	------	5,550

The stock of finished mixture at the end of 1994 is to be valued at the factory cost of the mixture for that year. The purchase price of raw–materials uncharged throughout 1994.

Prepare a statement giving the maximum possible information about cost and its break up for the year 1994.

(Ans. Prime cost Rs 3,77,800 factory cost Rs 5,16,200 cost of production of finished mixture sold Rs 5,71,852 cost of sales Rs 6,31,352)

4. Calculate
   a) Value of raw-materials consumed
   b) Total cost of production
   c) Cost of goods sold and
   d) The amount of profit from the following particulars:

	Rs		**Rs**
Opening stock		Power	2,000
Raw – materials	5,000	Factory heating and lighting	2,000
Finished goods	4,000	Factory insurance	1,000
Closing stock		Experimental Expenses	500
Raw – materials	4,000	Sales of wastage of materials	200
Finished goods	5,000	Office management salaries	4,000
Raw - materials purchased	50,000	Office printing and stationery	200
Wages paid to labourers	20,000	Salaries of salesmen commission of traveling agent	2,000
Chargeable expenses	2,000		
Factory rent, rates & taxes	5,000	Sales	1,00,000

(Ans. (a) Rs 50,800, (b) Rs 87,500, (c) Rs 89,500, (d) Rs 10,500)

[Hint sales of raw-materials wastage of Rs 200 has been deducted from the cost of raw-materials]

5. The cost of the sale of product 'X' is made up as follows:

	Rs
Materials used in manufacturing	10,20
Materials used in packing materials	2,500

Materials used in selling the product	350
Materials used in office	75
Materials used in factory	125
Labour required in producing	2,500
Salary paid to works manager and other principal officers of the factory	450
Expenses – indirect office	250
Expenses – direct factory	1,000
Bad debts	300
Packing expenses	150
Lighting and heating charges of the factory	200
Expenses – indirect factory	125

Assuming that all the products manufactured are sold, what should be the selling price to obtain a profit of 20% on cost price?

Illustrate in a chart fork for presentation to your mange, the division of costs of product 'X'

[Ans. Prime cost Rs 16,200, works cost Rs 17,100 cost of sales Rs 18,225 sales Rs 21,870]

6. Calculate the prime cost, factory cost, total cost of production and cost of sales from the following particulars:

		Rs.
Raw materials consumed		12,000
Directly chargeable expenses		500
Wages paid to labourers		2,500
Grease, oil, cotton waste etc.		25
Salary manager and clerks		1,750
Insurance of stock of raw materials		300
Consumable stores		400
Printing and stationery:		
Factory	50	
Office	200	
Sales deptt.	100	
	-----------	350
Rent of office building		150
Depreciation :		
Factory premises	200	
Office furniture	50	
Delivery vans	75	
	---------	325

Power and fuel		500
Contribution to provident fund of factory employees		1,000
Salaries of administrative directors		100
Bank charges		75
Cost of samples		250
Salaries of sales manger		300
Advertising		500
Packing material		350
Storage in stocks of finished goods		20

[Ans. Prime cost Rs 15,000, factory cost Rs 19225 total cost of production Rs 19,800 cost of sales Rs 21,395]

7. Calculate
    a) Value of raw-materials consumed
    b) Total cost of production
    c) Cost of goods sold and
    d) The amount of profit from the following particulars:

		Rs
Opening stock:		
Raw materials		1,350
Finished goods		2,500
Closing stock:		
Raw-materials		750
Finished goods		1,500
Raw materials purchased		20,000
Wages paid to labourers		8,000
Direct expenses		1,250
Experimental expenses		450
Factory printing and stationery		350
Rent :		
Factory	250	
Office	120	
	--------	370
Wages of fireman		1,000
Lighting – office		125
Audit fees		150
Telephone expenses		500
Advertising		1,250
Market research expenses		550
Salary of godown – keepers		175
Traveling expenses		750
Commission of traveling agent		500
Sales		50,000

[Ans. (a) value of raw – materials consumed Rs. 20,600 (b) Total cost of production Rs 32,795, (c) cost of goods sold Rs 33,795, (d) profit Rs 12,980]

8. Prepare a statement of cost from the following trading and profit and loss account for the year ending 31st March, 1995.

Particulars	Rs	Particulars	Rs
Opening stock:		Sales	1,00,000
Materials	8,000	**Closing stock:**	
Finished goods	25,000	Materials	15,000
Purchase of materials	70,000	Finished goods	30,000
Direct labour	10,000		
Grease, oil etc.	500		
Salary of storekeeper	700		
Power & fuel	800		
Gross profit c/d	30,000		
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	1,45,000		1,45,000
	-------------		-------------
Lighting:		Gross profit b/d	30,000
Office	500	Dividends received	2,000
Sales deptt.	650	Interest on loan	600
Depreciation:		Transfer fees	1,450
Office premises	1,000	Received	
Delivery vans	750		
Fees of office manager	2,000		
Bank charges	1,500		
Selling expenses	1,500		
Sales commission	500		
Preliminary expenses	3,000		
Packing expenses	1,100		
Dividends paid on	1,000		
Share capital of company			
Discount on debentures	500		
Net profit	20,000		
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	34,000		34,000

[Ans. Prime cost Rs 73,000, works cost Rs 75,000, total cost of production Rs 80,000 cost of goods sold Rs 75000 cost of sales Rs 79,000 profit Rs 21,000]

9. The following data relate to the manufacture of standard product during the four week ending on 28th Oct. 1994.

Raw materials consumed	Rs 20,000
Direct wages	Rs 12,000
Machine hr worked	950 (hrs)
Machine hour rate	Rs 2.00
Office overhead 15% on works cost	
Selling overhead	Rs 0.37 per unit
Units produced	20,000
Units sold @ Rs 2.50 each	18,000
Prepare a statement from the above showing:	
(a) The cost of production per unit, and	
(b) The profit for the period	

[Ans. (a) Rs 1,949 (b) Rs 3,258

10. A firm has purchased a plant to manufacture a new product, the cost data for which is given below:

Estimated annual sales	24,000 units
Estimated costs:	
Material	Rs 4.00 per unit
Direct labour	Rs 0.60 per unit
Overheads	Rs 24,000 per year
Administrative expenses	Rs 28,800 per year
Selling expenses	15% of sales
Calculate the selling price if profit per unit is Rs 1.02	

[Ans. Rs 9.20]

11. Prepare a cost sheet from the following data to find out profit and cost per unit:

Raw materials consumed	Rs 1,60,000
Direct wages	Rs 80,000
Factory overheads 20% of direct wages	
Office overheads 10% of factory cost	
Selling overheads	12,000
Unit produced	4,000
Units sold	3,600
Selling price	Rs 100 per unit

[Ans. Prime cost Rs 2,40,000, factory cost Rs 2,56,000, cost of production Rs 2,81,600, cost of sales Rs 2,65,440, profit Rs 94,560]