UNIT 9 TREATMENT OF OTHER OVERHEADS

Structure

9.0 Objectives
9.1 Introduction
9.2 Office and Administration Overheads
9.3 Selling and Distribution Overheads
 9.3.1 Classification
 9.3.2 Distribution
9.4 Treatment of Certain Items in Cost Accounts
 9.4.1 Interest on Capital
 9.4.2 Depreciation
 9.4.3 Research and Development Costs
 9.4.4 Royalties and Patent Fees
 9.4.5 Drawing Office Expenses
 9.4.6 Fringe Benefits
 9.4.7 Costing Office Expense
 9.4.8 Defective/Spoiled Work
 9.4.9 Packaging Expenses
 9.4.10 Patterns and Dies
 9.4.11 Idle Capacity
 9.4.12 Cash Discount
9.5 Items Excluded from Cost Accounts
9.6 Summary
9.7 Key Words
9.8 Answers to Check Your Progress
9.9 Terminal Questions

9.0 OBJECTIVES

After studying this unit you will be able to :

- explain the methods of absorption of administration overheads
- explain the methods of absorption of selling and distribution overheads
- describe the treatment of certain items of overheads like interest, depreciation, research and development expenditure in cost account.
- identify the items that are excluded from cost accounts.

9.1 INTRODUCTION

In Unit 8 you learnt about the distribution of production overheads including the methods of their absorption in cost units. In this unit you will learn about the distribution of non-production overheads viz., administrative overheads and selling and distribution overheads. This unit also discusses the treatment of certain peculiar items of overheads like interest, depreciation, research and development cost, labour welfare expenses, royalties, ctc.

9.2 OFFICE AND ADMWISTRATION OVERHEADS

You know that administration overheads are the costs of formulating the policy, directing the organisation and controlling the operations of an undertaking. They have no direct connection with production or sales. The examples of such expenses are salaries of office staff, legal charges, audit fees, depreciation of office machines and building, office rent, stationery, postage, typing charges, etc.

Administration overheads are collected and classified in the same way as production overheads. These are usually apportioned to various administrative departments which act as cost centres for the purpose of collection and control of administration overheads. The cost centres may be general office ; accounts department, personnel department. law department, etc. Some people argue that there are only two basic functions of a business i.e., production and sales. As administration overheads are incurred for the benefit of these two functions, they should be apportioned between production and sales department on some equitable basis. But, generally it is advocated that **administration is also a separate function like production and sales and, therefore, the administration overheads should be taken as an independent item of cost and added to the cost of a job or a product.**

There are various methods of absorption of administration overheads. These are : (1) production units method (absorption rate worked out per unit of output), (2) as a percentage of conversation cost, (3) & a percentage of sales, and (4) as a percentage of works cost. Of these, the most commonly used method is the percentage of works cost. Under this method, the absorption rate is worked out as follows :

$$\frac{\text{Total Administration Overheads}}{\text{Total Works Cost}} \times 100$$

For example, if the works cost is Rs. 10,000 and the total administration overheads are Rs. 2,000, the absorption rate will be 20% $\left(\frac{2{,}000}{10.000} \times 100\right)$ of works cost. Now, if works cost of a particular product is Rs. 600, the administration expenses to be added to its cost will be Rs. 120 (20% of Rs. 600).

Though administration overheads are fixed in nature and are incurred as a matter of policy of the management, some control can be exercised through budgets, standard costing and by comparison with part performance.

9.3 SELLING AND DISTRIBUTION OVERHEADS

Selling and distribution overheads are also non-production costs and they are incurred after the production of products or services is completed and hence known as 'after-production costs'. You know that selling overhead is the cost incurred to create and stimulate demand and increase the sales to the existing and potential customers e.g., advertisement, free gifts, salesmen's remuneration, etc. Distribution overhead is the cost incurred to take the finished goods from the place of production to the place of resale or consumption, e.g., carriage outwards, insurance, etc.

9.3.1 Classification

Selling and distribution overheads are classified into the following sections :

1 **Direct Selling expenses**

a) Remuneration of salesmen (salaries, bonus, commission, etc.)
b) Remuneration of technical staff (for products like machines, television sets, etc.)
c) Expenses of show rooms, sales depts., branches, etc.
d) Expenses on sales quotations, tenders, estimating, etc.
e) After sales service costs

2 **Advertising and Sales Promotion** : These expenses include costs of advertising (by newspapers, radio, etc,) pamphlels, free gifts, samples, exhibition or display, etc.

3 **Transportation Expenses** : The expenses relate to transportation which include upkeep of delivery vans, salaries of running and maintenance staff of delivery vans, and insurance of goods in transit.

4 **Warehousing and Storage** : It includes cost of storage of finished goods like warehouse rent, salaries of warehouse staff, packing costs for storage purpose, and insurance of finished stock in warehouse.

5 Credit and collection : Bad debts and debt collection expenses, legal expenses in connection with debt realisation. Generally these expenses are treated as selling overheads.

6 Financial and general administration : Costs such as royalty on sales, invoicing, accounts maintenance for selling and distribution sales statistics etc.

9.3.2 Distribution

The distribution of selling and distribution overhead can be discussed in three stages :

1 Collection and analysis : Firstly, the overheads must be collected under standing order numbers provided for this purpose,

2 **Allocation and** apportionment to cost centres : This is similar to the apportionment of production overheads to cost centres. The selling and distribution overheads are apportioned to different cost centres like warehouse, transportation etc. Common bases for apportionment are as follows :

	Expenses	*Basis*
i)	Salesmen remuneration	Direct allocation
ii)	Advertising :	
	Door to door	Direct allocation
	Radio, TV, Press.	Space used or value of sales
iii)	Show room expenses	Floor area
iv)	Insurance	Value of goods
v)	Packing	Direct allocation
vi)	Catalogues'	Direct allocation or space used

3 Absorption of Selling and Distribution overhead : After apportionment, these overheads must be absorbed by cost units. Selling and distribution overheads fall into two categories. These are as follows :

a) Those which are incurred only when the article is sold. They vary in direct proportion to sales value or volume of sales representing variable overheads. They represent a definite amount per unit sold and so charged accordingly,

b) Those which are incurred whether an article is sold or not. They do not vary with units sold. They have to be absorbed in any one of the following ways :

i) Rate per unit sold : The total selling and distribution overheads are divided by the number of units sold to get a rate per unit. This method is followed when the units sold are uniform.

ii) Percentage of Selling Price : The formula for calculating percentage of selling and distribution expenses to sales is as follows :

$$\frac{\text{Selling and Distribution Overheads}}{\text{Sales}} \times 100$$

For example, if sales are Rs. 2,00,000 p.a. and selling costs are Rs. 50,000, then, selling overheads to be absorbed will be 25% $\left(\frac{50,000}{2,00,000} \times 100\right)$ of selling price of each article sold. This method is usually followed for the absorption of selling and distribution overheads.

iii) Percentage of works cost

$$\frac{\text{Selling and Distribution Overheads}}{\text{Works Cost}} \times 100$$

If selling costs are Rs. 20.000 and works cost is Rs. 1,00,000 then selling costs will be absorbed at 20% $\left(\frac{20,000}{1,00,000} \times 100\right)$ of works cost. This method is successful if only one type of product is sold. If there are more than one product, this method cannot be used as it does not recognise the different efforts involved in selling different products.

These rates are pre-determined and applied. As a result, there may be under or over-absorption of overheads. The treatment will be the same as discussed in Unit 8.

Illustration 1 clarifies how selling and distribution overheads are distributed over different products manufactured by an organisation.

Illustration 1

Show the distribution of expenses and the cost per unit of A, B, and C from the following particulars:

	Rs.
Sales salaries	20,000
Sales commission	12,000
Sales office expenses	4,000
Advertising — general	5,000
Advertising — specific	11,000
Packing expenses	1,500
Delivery van expenses	2,400
Warehouse expenses	1,800
Credit collection expenses	3,000
	60,700

Additional Information

		Total	Size A	Size B	Size C
1	Number of salesman (all paid same salary)	10	4	5	1
2	Units sold	2,000	1,000	500	500
3	Number of orders	1,000	400	200	400
4	Percentage of specific advertising	100%	40%	30%	30%
5	Sales turnover	Rs. 2,00,000	1,20,000	40,000	40,000
6	Volume in cubic ft. per unit of finished product	—	15	10	5

Solution:

Statement Showing Apportionment of Selling and Distribution Overheads

Item	Basis of apportionment	Total	Sizes A	Sizes B	Sizes C
		Rs.	Rs.	Rs.	Rs.
Sales salaries	Number of salesmen (4 : 5 : 1)	20,000	8,000	10,000	2,000
Sales commission	Sales turnover (3 : 1 : 1)	12,000	7,200	2,400	2,400
Sales Office Expenses	No. of orders (4 : 2 : 4)	4,000	1,600	800	1,600
Advertisement General	Sales turnover (3 : 1 : 1)	5,000	3,000	1,000	1,000

Advertisement specific	Direct allocation (40%, 30%. 30%)	11,000	4,400	3,300	3,300
Packing expenses	Volume in cubic.ft. of products sold (3 : 2 : 1)	1,500	750	500	250
Delivery expenses	—do— (3: 2: 1)	2,400	1,200	800	400
Warehouse expenses	—do—	1.800	900	600	400
Credit collection expenses	No. of orders (2 : 1 : 2)	3,000	1,200	600	1,200
	Total	60,700	28,250	20,000	12.450
	Units sold		1,000	500	500
Cost per unit (Total divided by units sold)			28.25	40	24.90

Check Your Progress A

1 Name the four methods of absorption of administration overheads.

....

....

....

....

2 Give two examples of distribution overheads.

....

....

3 Under what circumstances you would regard 'Rate per unit sold' as the suitable method of absorption of selling and distribution overheads ?

....

....

4 Fill in the blanks

i) Selling and distribution expenses are .... costs

ii) Overheads are collected under ....

iii) Advertisement is an example of .... overheads.

iv) Show-room expenses are apportioned on the basis of ....

v) Bad debts are treated as .... costs.

9.4 TREATMENT OF CERTAIN ITEMS IN COST ACCOUNTS

There are certain items of overheads the treatment of which vary from concern to concern depending upon the size of the concern, the method of production used and the policy followed by management. Let us examine such items more closely and study how they are to be treated in cost accounts.

9.4.1 Interest on Capital

There is a great deal of controversy regarding the inclusion of interest on capital in the cost accounts. There are arguments both in favour and against it. These are summarised below :

For inclusion

1 Interest is as much a production cost as wages. Wages are the reward for labour and interest is the reward for capital.

2 Real profit cannot be ascertained until interest on capital (paid or provided) is charged to cost units.

3 Results of different activities cannot be comparable unless interest factor is taken into account.

4 The true cost of maintaining stocks cannot be ascertained without taking into account the interest on capital invested in stocks.

5 Where management has to decide about the replacement of manual labour by machines, a true comparison cannot be made unless interest on capital investment in machine is taken into account.

Against Inclusion

1 The argument that wages are the reward of labour and interest is the reward of capital, holds good in economics and not in costing.

2, Interest is purely a matter of finance, hence excluded from cost.

3 It is difficult to ascertain the fair rate if interest due to frequent charges in market rates and so also the exact amount of capital on which interest is to be calculated.

4 Calculated interest in cost accounts creates unnecessary complications in managerial decisions and comparisons involving interest can be done on separate statements.

After considering the above arguments bolh for and against the inclusion of interest in cost accounts, it can be concluded

a) that interest need not be rewarded in cost accounts, and

b) that it should be taken into consideration while making cost comparisons and submitting cost dates for managerial decisions.

9.4.2 Depreciation

Depreciation is the diminution in the value of a fixed asset due to constant use or passage of time. In order lo work out the exact cost of manufacturing, depreciation of the fixed assets like machinery and factory building must be taken into account. In order to determine the amount of depreciation chargeable to productions it is necessary to estimate the working life of the asset in terms of years or production hours and ascertain its total cost by adding installation charges to its original cost minus estimated scrap value.

There are various methods that can be used for calculating depreciation such as straight line method, written down value method, sum of years digits method, annuity method, production hours or production units method. The choice of method usually depends upon the type of asset and the nature of business. But, in cost accounts, mostly straight line method or production hours method is used because of their simplicity and convenience,

9.4.3 Research and Development Costs

The costs incurred on discovery of new product or improved product ideas or improved method are considered to be research costs. The costs incurred in implementing the decision to produce the new or improved product are considered as development costs,

If research is conducted in the methods of production, the cost is taken as production. overheads and if it relates to administration, the costs are treated as administration overheads. Market research expenses are, charged to selling and distribution overheads. If research is conducted in bringing a new or an improved product, the costs are charged directly to that product. In case research proves to be unsuccessful,its cost is treated as deferred revenue expenditure and charged to Costing Profit and Loss Account.

The cost of regular research and development (R & D) activity incurred out of a separate financial provision is excluded from cost accounts.

9.4.4 Royalties and Patent Fees

If royalties and patent fees are payable on the basis of output, the amount should be regarded as a direct expense and, therefore, included in the prime cost of the product concerned. But, if they are payable on the basis of units sold (as in case of books), the same is treated as a selling expense and so included in selling and distribution overheads.

9.4.5 Drawing Office Expenses

Expenses on the work of drawing office is the preparation of production plans, drawing and designs. If drawings or designs are prepared for a specific job, drawing costs will be treated as direct expenses and charged to the job concerned. In case drawings are made to educate the customers or enclosed with sales tenders, the cost of drawings will be treated as selling overheads. But, if the services are of a geperal nature meant for the concern as a whole, the expenses are treated as production overheads and apportioned to production departments on the basis of service rendered **i.e.,** man hours worked or number of drawings made.

9.4.6 Fringe Benefits

Besides basic wages and cash allowances like DA, HRA and CCA, some indirect monetary benefits such as medical facilities, canteen facilities, housing facilities (called fringe benefits) arc enjoyed by the workers in factories. They are not related to the quantity of work done. Hence, the costs of such benefits will be treated as production overheads and allocated to different departments on the basis of number of workers employed.

9.4.7 Costing Office Expenses

They are generally charged to administration overheads. Sometimes, they may be apportioned to various functions like production, administration and selling and distribution on the basis of estimated benefits obtained by each.

9.4.8 Defective/Spoiled Work

If the defective work and spoilage is inherent in the process of manufacture, such loss should'be included in the cost of production. It is treated as normal loss and charged as an overhead. If these are due to abnormal factors like fire, accident, machine break-down etc., the net loss (sale/value realised by selling the spoiled work/scrap) should be charged to Costing Profit and Loss Account.

Defective work is sometimes sent back to production department for correction. In tnat case, the cost of remedying the defect may be treated as production overheads.

9.4.9 Packaging Expenses

Packaging is necessary for handling the products like medicines, oil, liquid products, etc. Their packaging costs are treated as manufacturing cost and is included in direct materials. But the fancy/decorative packaging meant to attract customers is a sales promotional activity and may be charged as selling overheads. It should be noted that packaging is not synonymous to packing. Packing is used for transportation or delivery of goods to customers' place. Hence, it is treated as distribution overhead.

9.4.10 Patterns and Dies

The patterns, moulds or dies are made for a particular 'job or work order. Hence their costs should be charged to that job or work order as a direct expense and included in its prime cost. However, if these are meant for production in general, their cost (or depreciation) should be treated as an item of factory overheads.

9.4.11 Idle Capacity

Normally the plant capacity should be fully utilised. But, it is difficult to achieve it in practice. In other words, some capacity may remain unutilised (idle). This may be due to a variety of factors such as defective planning and scheduling of work, over expansion of capacity, seasonal fluctuations of demand, etc. Remedial measures are devised once the cause of idle capacity is established. The overhead costs arising from avoidable idle capacity are generally charged to Costing Profit and Loss Account. However, certain amount of idle capacity is considered normal (setting up time or maintenance period). Its overhead cost is duly taken into account while calculating the hourly rate for production overheads.

9.4.12 Cash Discount

Cash discount is the discount allowed for prompt payment by debtors. It is regarded as a financial cost and, therefore, excluded from the costs.

9.5 ITEMS EXCLUDED FROM COST ACCOUNTS

There are certain items which are excluded from cost accounts. These are :

a) **Purely** financial **charges**
Loss on sale of fixed assets
Discounts on issue of shares, debentures, etc.
Loss on sale of investments
Fines and penalties
Donations
Interest on bank loans and mortgages
Cash discount

b) **Purely** financial incomes
Profit on sale of fixed assets
Interest and dividends received on inveslments
Transfer fees received
Kent received

c) Appropriations **of** profit
Dividends paid
Amounts written off like goodwill
Preliminary expenses
Income tax
Transfer to reserves

Check Your Pı-ogress B

1 Give two reasons why interest on capital is excluded from costs.

....

....

....

....

2 Name two methods of computing depreciation that arc commonly used in cost accounts.

....

....

3 State whcthcr each of the following statements arc True or False.

i) If cxperimcnt proves unsuccessful its cost is charged to Costing Profit and Loss Account.

ii) Royalties are trcatcd as production overheads.

iii) Costing officc expenses are treated as selling overheads.

iv) Packing is a distribution overhead. .

v) Cash discount allowed is not included in cost.

vi) 'Fines and penalties are treated as administrative overheads.

9.6 SUMMARY

Administration and selling and distribution overheads are regarded as non-production costs.

Like production and sales, administration is also treated as a separate function. Hence the administration overheads are treated as a separate item of cost. Since they constitute a minor portion of the total cost, it is not considered desirable to follow a complicated method of allocation and apportionment. A blanket overhead rate is computed for the entire factory either as a percentage of works cost or as a percentage of sales.

The allocation of selling and distribution overheads are collected, allocated and apportioned to different cost centres in the same manner as the production overheads. Rate per unit sold or percentage of selling price are the two methods used for their absorption.

Depreciation of plant and machinery is included in production overheads either according to original cost method or machine how rate method. Interest on capital is normally excluded from cost accounts. Research and development costs are charged to cost of the products for which they are incurred unless these are by way of a financial provision used for regular research and development activity (R&D). Cost of fringe benefits provided to labour is an item of production overheads and is apportioned on the basis of number of employees in each department. Royalties and patents are treated as a direct cost unless paid on the basis of sale (then they are charged as selling overheads). Packing cost is a distribution overhead whereas packaging cost is a direct cost included in materials. Cash discount, being an item of purely financial nature, is excluded from costs. The overhead cost of normal idle capacity is absorbed by the cost unit, but that of abnormal capacity is charged to Costing Profit and Loss Account.

Certain items of costs which are purely of a financial nature are excluded from cost accounts. Similarly, the items which are in the form of appropriation of profits are also exclutled.

9.7 KEY WORDS

Appropriation of Profit : Utilisation or distribution of profit.

Defective work : Defective finished goods produced in the factory which requires correction or have to be sold at a loss.

Development Cost : Cost incurred in implementing the decision to produce new/improved product

Idle Capacity : Unused production potential of the plant.

Research Cost : Cost incurred for experimentation on new/improved product, idea or method.

Royalties : Rent/fees paid for the use of a patent or-copyright.

Spoilage : Rejected units of output having little or no value,

9.8 ANSWERS TO CHECK YOUR PROGRESS

A 4 i) non-production ii) standing order numbers iii) selling iv) floor space v) selling

B 3 i) True ii) False iii) False iv) True v) True vi) False

9.9 TERMINAL QUESTIONS

1 Explain the different methods of absorption of administrative overheads. Which method would you prefer and why ?

2 How do you classify and apportion selling and disaibution overheads. How are the selling overheads absorbed by cost units ?

3 Explain the treatment of the following items of overheads in cost accounts :

a) Interest on Capital
b) Depreciation
c) Fringe benefits
d) Repairs and maintenance, and
e) Defective and spoiled work

4 List the items excluded from cost accounts.

Note : These questions will help you to understand the unit better. Try to write answers for them. But do not submit your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

Arora, M.N. 1'988, *A Text Book of Cost Accountancy*, Vikas Publishing House Pvt. Ltd., New Delhi. (Chapter 9-12).

Bhar, B.K. 1990. *Cost Accounting : Methods and Problems*, Academic Publishers. Calcutta. (Chapter 1-2).

Maheshwari, S.N. and S.N. Mittal, 1990. *Cost Accounting : Theory and Problems*, Shree Mahavir Book Depot, Delhi. (Chapter 4, 5).

Nigam B.M.L. and G. L. Sharma, 1990. *Theory and Techniques of Cost Accounting*, Himalaya Publishing House, Bombay. (Chapter 8-10).

Owler, L.W.J. and J.L. Brown, 1984. *Wheldon's Cost Accounting*, ELBS, London. (Chapter 7-9).