UNIT 3 DEPARTMENTAL ACCOUNTS

Structure

3.0 OBJECTIVES

After studying this unit, you should be able to :

- describe the nature and purpose of accounting for departmental transactions,
- outline the importance and advantages of deparhnental accounts,
- explain the process of recording departmental transactions and prepare departmental trading and profit & loss account,
- allocate the expenses between different departments by selecting some rational basis,
- explain the accounting treatment of inter-departmental transfers on the basis of cost price as well as transfer price,
- work out the amount of unrealised profit in respect of unsold/unused goods and explain its accounting treatment.

3.1 INTRODUCTION

You have learnt that a business unit may be operating through a network of branches like those of Bata which has branches all over the country or Snowhite which has branches all over the city of Delhi. You also know that, in such a situation, each branch is treated as a separate profit centre and the profit or loss is worked out for each branch separately. Similarly, in many cases, the activities of the business unit may be divided into a number of divisions or departments that are usually located under the same roof and each dealing In different types of goods. For example, a Super Market or a Departmental Store may have separate sales counters/sections for ready-made garments, cosmetics, electrical appliances, medicines, gift items, etc. For purposes of meaningful supervision of the affairs of each section or department and the assessment of their individual performance it is advisable to maintain accounts in such a manner that we can prepare a trading and profit & loss account for each section or department separately and work out its profit or loss. In this unit, you will learn how are the departmental accounts maintained and how are the common expenses allocated to each section or department in order to arrive at its profit or loss separately.

3.2 MEANING AND PURPOSE OF DEPARTMENTAL ACCOUNTS

Departmental accounts refer to the maintenance of accounts of a business in a manner that makes it possible to ascertain the operational results of each activity, section or department by preparing separate trading and profit & loss account for each ane of them. In fact, departmental accounts are nothing more than as many trading and profit & loss accounts as there are the departments.

As indicated in Section 3.1, the main purpose of preparing departmental accounts is to ascertain the financial performance of each section or department. This is considered necessary

1) to identify the departments which are inefficient and which need better attention;
2) to control wastage or misuse of resources in different departments;
3) to compare the performance of different departments, and also of their own with those of the previous years;
4) to evaluate the contribution of the departmental employees, compensate them suitably by way of commission on departmental profit and motivate them for still better results;
5) to formulate suitable policies with regard to future business planning for expansion; and
6) to consolidate all operations on more profitable lines which may involve closing down of unprofitable sections and improving the activities of departments which generate' satisfactory profits.

Thus, in case of organisations that are engaged in various lines of business, the preparation of departmental accounts is almost a financial necessity and a managerial responsibility.

3.3 IMPORTANCE OF DEPARTMENTAL ACCOUNTS

The Profit and Loss Account for the organisation as a whole does not reveal effectively the true operational results of different departments within the organisation. In any manufacturing unit, while some departments may be running in profit, others may suffer a loss. The net result, however, may still be a position of profit and this profit becomes an indicator of successful performance of the entire business. But, in reality, the actual profit of the business could be higher than the one shown by the books of account provided we were able to check the working of weaker departments.

A system of departmental accounts, therefore, has the following advantages :

1) It facilitates better control of operations.
2) It fixes responsibility of the departmental managers.
3) It improves the overall efficiency of the business.
4) It shows the profit or loss position of the business in a more direct and specific manner.
5) It helps formulation of policies suitable to further expansion.
6) It rewards departmental managers on the basis of their achievement and results.
7) It offers an opportunity to compare departmental results,

3.4 RECORDING OF TRANSACTIONS

You have learnt that departmental accounts aim at preparing Trading and Profit & Loss Account of every department separately. This needs specific data in respect of sale, purchase and stock for each department. For this purpose, the subsidiary books like Purchases Book, Sales Book, Purchase Returns Book, Sales Returns Book, Cash, Book etc., should provide separate columns for each section/department of the business and then for them to be accumulated under separate heads in the ledger. For example, if a business has three departments X, Y and Z, the Purchases Book, Sales Book, etc., should have separate columns for X. Y and Z departments.

A specimen of Purchases Book in a columnar form showing separate details for each department is given in Figure 3.1.

Figure 3.1

PURCHASES BOOK

Date	Particulars	L.F.	Total Rs.	Dept. X Rs.	Dept. Y Rs.	Dept. Z Rs.

The same format could be used for other subsidiary books too. The Cash Book may also have separate columns to record cnsh sales and cash purchases for ench department in their respective columns. **Alternatively, a separate** sat of hooks **may** be **maintained** for **different departments.**

Check Your Progress **A**

1) Departmental accounts assist the business in :
   a) reducing trading losses
   b) improving business profits
   c) increasing emoluments of employees
   d) minimising cost.of production
   e) facing market competition
   f) estimating the possible future trends in turnover
   g) knowing the profit or loss of different branches
   h) planning for product diversificntion
   i) designing new lines of output

   State which of the above phrnses is FALSE.

2) Mahima Trading runs three sales counters :
   i) Cosmetics
   ii) Ready-made Garments, and
   iii) Magazines

   The Net Profit of the business for the yew ending 31st March, 1998 is Rs. 5,80,000. The amount of capital invested in the business is Rs. 50,00,000.

   a) Do you consider the financial results of the business so as to provide satisfactory financial results.
   b) Can you suggest any modification in the accounting system followed by the business so as to provide sntisfnctory financial results.

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3.5 ALLOCATION OF EXPENSES

Whether we maintain separate books ot account for different departments or provide additional columns in subsidiary books, the main problem in ascertaining the profit or loss for ench department relates to the allocation of business expenses to various departments. There we some expenses which we specifically incurred for a particular department such as salary payable to departmental staff or electricity charges if separate meters have been installed for each department. These can be directly attributed to the departments concerned and present no problem. Similarly, we do not face much problem in ascertaining the amounts relating to opening stock, purchases, expenses incurred on purchases, purchase returns, sales, sales returns, and closing stock for each department as the subsidiary books could provide the necessary details. The real problem, however, relates to the apportionment of business expenses that are incurred for the business as a whole e.g., advertisement expenses, salary of managers, labour welfare expenses that are incurred for the business as a whole e.g., advertisement expenses, salary of managers, Iabour welfare expenses, indirect wages, depreciation, etc. These are called cotnmon (combined) expenses and have to be apportioned among various departments on some rational basis. Now the question arises as to what exactly is the rational basis for apportioning such expenses.

Based on the nature of each expense and what obtains in practice, it could be any one of the following bases.

a) Amount of wages incurred by each department;

b) Number of workers in each department;

c) Floor area occupied by each department;

d) Production hours of each department;

e) Sales made by each department;

f) Capital value of assets held by each department; and

f) Technical estimate.

Let us take a few common expenses and note the possible bases of their allocation as follows :

	Expenditure	Basis Applied for Allocation
1	Selling Commission	Sales
2	Bad Debts	Sales
3	Carriage Outwards	Sales
4	Rent and Rates	Floor area covered
5	Building Insurance	Floor area covered
6	Building Repairs	Floor area covered
7	Lighting	Number of lighting points or Floor ,area covered
8	Depreciation	Value of assets or wages
9	Power	Horse Power of Machinery Installed
10	Insurance	Average Stock, Value of Asset
11	Workmen's Compensation	Wages
12	Labour Welfare Expenses	Number of Employees
13	Advertising	Sales or Space Allocated to each Department

There are however some expenses that cannot be allocated or apportioned to different departments on any suitable basis such as audit fees, director's fees, interest on loan, etc. These need not be taken into account for ascertaining the profit or loss of different departments but may be charged to combined General Profit & Loss Account.

Thus, for purposes of departmental accounts, three broad principles of allocating the expenses emerge. These are as follows :

1) Expenses which are directly attributable to a particular department should be charged to that department.

2) Expenses which are common should be apportioned among different departments on,some suitable basis.

3) Expenses which are difficult to apportion among different departments on some suitable basis may be charged to General Profit & Loss Account of the business.

Look at Illustrations 1 and 2 and see how different expenses have been allocated to different departments while preparing the Departmental Trading and Profit & Loss Account.

Illustration 1

Saini Brothers are lending paper merchants and booksellers. Their wholesale business is in paper and their retail showroom conducts business in stationery, books and magazines. The following balances are extracted from their books as at the end of their financial year, 31st March 1998 :

	Rs.
Capital	3,00,000
Stock : (1-4-1997)	
Paper	2,00,000
Stationery	50,000
Books	1,00,000
Magazines	25,000
Purchases	
Paper	8,00,000
Stationery	3,00,000
Books	3,50,000
Magazines	3,00,000
Sales :	
Paper	10,00,000
Stationery	3,60,000
Books	4,20,000
Magazines	4,20,000
Rent	60,000
Lighting	24,000
Showroom maintenance	18,000
Showroom fittings	1,80,000
Sundry Debtors (for paper)	1,00,000
Sundry Creditors	1,50,000
Salaries :	
Showroom staff	36,000
Wholesale business staff	12,000
Showroom cashier	12,000
General Office Salaries	11,000
General Office Expenses	11,000
Cash and Bank Balances	8,000

You are requested by the firm to prepare their Departmental Trading and Profit and Loss Account for the financial year under reference with the help of the following additional information :

1) Closing stock at the end of the year in the various departments were :

Paper	:	Rs. 1,80,000	Stationery	:	Rs. 40,000
Books	:	Rs. 1,20,000	Magazines	:	Rs. 30,000

2) Rent and lighting are for premises taken on lease, General office accommodation is negligible. Wholesale department uses 1,500 sq. feet. The balance of 1,500 sq. feet is occupied by the Show-room with equal division among stationery, books and magazines.

3) Show-room fittings are to be depreciated by 10% p.a.

Solution

Departmental Trading and Profit & Loss Account for the year ending 31-3-1998.

	Paper	Stationery	Books	Magazines		Paper	Stationery	Books	Magazine
Opening Stock	2,00,000	50,0110	1,00,000	25,000	Sales	10,00,000	3,60,000	4,20,000	4,20,000
Purchases	8,00,000	3,00,000	3,50,000	3,00,000	Closing Stock	1,80,000	40,000	1,20,000	30,000
Gross Profit c/d	1,80,000	50,000	90,000	1,25,000					
	11,80,000	4,00,000	5,40,000	4,50,000		11,80,000	4,00,000	5,40,000	4,50,000
Rent	30.000	10,000	10,000	10,000	Gross Profit b/d	1,80,000	50,000	90,000	1,25,000
Lighting	12,000	4,000	4,000	4,000					
Show-room Maintenance	–	6,000	6,000	6,000					
Salaries	12,000	14,400	16,800	16,800					
Gen. Office Salaries	5,000	1,800	2,100	2,100					
Gen. office Expenses	20,000	7,200	8,400	8,400					
Depreciation	–	6,000	6,000	6,000					
Net Profit	1,01,000	600	36,700	71,700					
	1,80,000	50,000	90,000	1,25,000		1,80,000	50,000	90,000	1,25,000

Notes :

1) Show-room maintenance and depreciation or showroom fittings have been equally divided among the three retail departments.

2) Salaries of show-room staff and show-room cashier have been divided among the three retail departments on the basis of sales.

3) General office salaries and General Office Expense have been apportioned among all the four departments on the basis of sales.

Illustration 2

The Trading and Profit & Loss Account of Chandni Electricals for six months ended 31st March, 1998 is as follows :

	Rs.		Rs.
To Purchases :		By Sales :	
TV Sets (A)	14,07,000	TV Sets (A)	15,00,000
Radio Sets (B)	9,06,000	Radio Sets (B)	10,00,000
Spare Parts (C)	6,44,000	Servicing (C)	2,50,000
To Salaries & Wages	4,80,000	By Closing Stock :	
To Rent	1,08,000	TV Sets (A)	6,01,000
To Sundry Expenses	1,10,000	Radio Sets (B)	2,03,000
To Net Profit	3,45,000	Spare Parts (C)	4,46,000
	40,00,000		40,00,000

On the basis of the following additional information, prepare Departmental Accounts for each of the three departments A, B and C:

1) TV Sets and Radio Sets are sold at the Showroom.

2) Servicing and Repairs are carried out at the Workshop.

3) Salaries and Wages comprise :
   Showroom ¾
   Workshop ¼

4) It was decided to allocate the Show-room Salaries and Wages in the ratio of 1:2 between the departments A and B.

5) The Workshop Rent is Rs. 5,000 per month. The Showroom Rent is to be divided equally between departments A and B.

6) Sundry Expenses are to be allocated on the basis of turnover of each department.

Solution

Departmental Trading and Profit and Loss Account for six months ending 31st March, 1998

Dr. a

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Purchases	14,07,000	9,06,000	6,44,000	By Sales	15,00,000	10,00,000	2,50,000
To Salaries & Wages	1,20,000	2,40,000	1,20,000	By Closing Stock	6,01,000	2,03,000	4,46,000
To Rent	39,000	39,000	30.000	By Net Loss	–	22,000	1,08,000
To Sundry Expenses	60,000	40,000	10,000				
To Net Profit	4,75,000	–	–				
Rs.	21,01,000	12,25,000	8,04,000	Rs.	21,01,000	12,25,000	8,04,000

3.6 INTER-DEPARTMENTAL TRANSFERS

'Sometimes the departments within an organisation operate as a chain of activities. As a result, the product of one department may be used as a raw material in another department. For example, a firm may have two departments, cloth and ready-made garments. The garments are made out of the cloth supplied by cloth department. Such supply of cloth is called inter-departmental transfer. The accounting entry in such cases involves debiting the department which receives goods or services, and crediting the department which supplies them.

The inter-departmental transfer of goods or services may be done either (a) at Cost Price, or (b) at Selling Price.

When goods or services are supplied from one department to another at cost price, the corresponding entries to record the transfer will be made at cost price. This does not involve any adjustment at any stage. However, when goods or services are supplied to another department at selling price, the transfer has to be recorded at a selling price called transfer price. This obviously includes cost as well as profit, In such a situation, if the department to whom goods or services are transferred at selling price has an unsold on unused stock at the end of the accounting period, this involves an element of unrealised profit. This needs an adjustment which will be ma& by creating a stock reserve with the help of the following journal entry :

General Profit & Loss A/c Dr.
To Stock Reserve

It may be noted that the unrealised profit is equal to the amount of difference between the selling price and the cost price of the unsold/unused stock.

Check **Your Progress B**

1) State whether each of the following statements is TRUE or FALSE : .

   i) Non-departmental expenses are charged to the General Profit and Loss Account.

   ii) Repairs to Machinery are allocated,to different departments on the basis of the number of machines in each department.

   iii) The cost of electric power should be apportioned over different departments according to horse power installed multiplied by machine hours.

   iv) The amount of Stock Reserve on goods transferred from Department X to Department Y on a price 25% above cost means that the value of closing stock will be reduced by 20%

2) Put a tick mark (√) against the correct answer :

i) When the rate of Gross Profit of three Departments A, B and C is the same,, the cost price of these departments will be in the ratio of their respective :

a) Sales Value

b) Stock Value

ii) Allocation of premium paid on insurance of a building among the departments should be based on :

a) Annual Sales

b) Floor Area Occupied

iii) Depreciation on Plant and Machinery should be divided over the different departments :

a) Equally

b) On the basis of Production Capacity of each department

c) On the basis of value of machines in each department.

iv) Debts which cannot be realised, should be written off from :

a) the General Profit and Loss Account

b) *a* charge to the different departments on the basis of their sales

v) Management expenses should be charged to :

a) Departmental Profit and Loss Account equally

b) General Profit and Loss Accou'nt

vi) Stock Reserve for unrealised profit on inter-department. transfer should be charged to :

a) General Profit and Loss Account

b) Departmental Profit and Loss Account equally

Look at Illustrations 3 to 6 and see how inter-departmental transfer is showr in Departmental Trading and Profit & Loss Account, and how unrealised profit on unsold unused stock with transferee department is dealt with if transfer is made at the selling price. It needs to be noted that an adjustment for unrealised profit will also be necessary for the opening stock of the transferred goods, if any.

Illustration 3

From the following Trial Balance of Chema and Smriti, prepare Departmental Trading and Profit and Loss Account for the year ending 31st March, 1998 and the Balance Sheet as at that date :

	Rupees in '000
Stock (1st April, 1997)	
Department X	3,400
Department Y	2,900
Purchases	
Department X	7,180
Department Y	6,040
Sates	
Department X	13,160
Department Y	10,250
Wages	
Department X	1,640
Department Y	540

Rent, Rates & Taxes	1,878
Sundry Expenses	720
Salaries	600
Lighting & Heating	420
Discount Allowed	444
Discount Received	130
Advertising	736
Carriage Inwards	468
Furniture & Fittings	600
Machinery	4,200
Sundry Debtors	1,212
Sundry Creditors	3,720
Cnpital	9,532
Drawings	900
Cash nt Hank	2,014

The following additional information is available :

1) .Inter-transfer of goods from X to Y Department Rs. 84,000.
2) Rent, Rates and Taxes, Sundry Expenses, Lighting and Heating, Salaries and Carriage are to bc apportioned 2/3 to X Department and 1/3 to Y Department.
3) Advertising is to be apportioned equally.
4) Discount allowed and received are to be apportioned on the basis of Departmental Sales and Purchases (excluding transfers).
5) Depreciation at 10% per annum on Furniture and Fittings and on Machinery is to be charged 314 to X and 114 to Y.
6) Services rendered by Y Department to X Department are included in its wages Rs. 1,00,000.
7) Stock on 31st March, 1998 in X Department was worth Its. 33,48,000 and in Y Department Rs. 24,111,000.

Solution

Departmental Trading and Profit & Loss Account
for the ycur ending 31st March, 1998

(Rupees '000)

Dr. Cr.

	X Rs.	Y Rs.		X Rs.	Y Rs.
To Opening Stock	3,400	2,900	By Sales	12,160	10,250
To Purchases	7,080	6,040	By Transfer of Goods	84	100
To Wages	1,640	540	By Closing Stock	3,348	2,410
To Transfer of Goods	100	84			
To Carriage Inwards	312	156			
To Gross Profit c/d	3,060	3,040			
	15,592	12,760		15,592	12,760
To Salary	400	200	By Gross Profit b/d	3,060	3,040
To Rent, Rates & Taxes	1,252	626	By Discount		
To Sundry Expenses	480	240	Received	70	60
To Lighting & Heating	280	140	By Net Loss	252	–
To Advertising	368	368			
To Depreciation :					
On Machinery	315	105			
On Furniture .	45	15			
To Discount Allowed	242	202			
To Net Profit	–	1,204			
	3,382	3,100		3,382	3,100

BALANCE SHEET
As on 31st March, 1998

(Rupees '000)

Assets	X Rs.	Y Rs.	Liabilities	X Rs.	Y Rs.
Capital	9,532		Machinery	4,200	
Add: Profit	952		Less: Dep.	420	
	10,484				3,780
Less : Drawings	900	9,584	Furniture & Fittings	600	
Sundry Creditors		3,720	Less : Dep.	60	540
			Stock-in-Trade		5,758
			Sundry Debtors		1,212
			Cash at Bank		2,014
		13,304			13,304

Illustration 4

Department A transferred to Department B 4,000 units of material X at Rs. 10 per unit, The actual cost of materials of Department A is Rs. 8 per unit:

Find out the Stock Reserve on 1,000 units of material X which could not be consumed by Department B during the year.

Solution

Percentage of profit charged by Department A on supplies made to Department B =

$$\frac{\text{Difference between Selling Price and Cost Price}}{\text{Selling Price}} \times 100$$

$$= \frac{2}{10} \times 100$$

$$= 20\%$$

Value of Stock Reserve or Unrealised Profit on Unconsumed Materials

$$= 1{,}000 \times \frac{20}{100}$$

$$= \text{Rs. } 2{,}000$$

Illustration 5

The following figures relate to the business of Pushpa Associates for the year ended 31st December, 1997 :

	Department X Rs.	Department Y Rs.
Stock (1st January, 1997)	80,000	–
Purchases from outside	4,00,000	40,000
Wages	20,000	2,000
Transfer of Goods from Dept. X	–	1,00,000
Stock at Cost (31st December, 1997)	60,000	20,000
Sales	4,00,000	1,42,000

Y's entire stock represents goods from Department X which transfers them at 25% above the cost, Administrative and Selling Expenses amount to Rs. 30,000 which are to be allocated between Departments X and Y in the ratio of 4:1 respectively.

Prepare Departmental Trading and Profit and Loss Account and a Combined Income Account of the business for the year ended 31st December, 1997.

Solution

Departmental Trading and Profit & Loss Account
for the year ending December 31st 1997

Dr	X Rs.	Y Rs.		X Rs.	Y Rs. Cr
To Opening Stock	80,000	–	By Transfer of Goods to Y	1,00,000	
To Purchases	4,00,000	40,000	By Sales	4,00,000	1,42,000
To Wages	20,000	2,000	By Closing Stock	60,000	20,000
To Goods from X	–	1,00,000			
To Gross Profit c/d	60,000	20,000			
	5,60,000	1,62,000		5,60,000	1,62,000
To Adm. & Selling Expenses	24,000	6,000	By Gross Profit b/d	60,000	20,000
To Net Profit	36,000	14,000			
Rs.	60,000	20,000	Rs.	60,000	20,000

General Profit and Loss Account
for the year ending December 31, 1997

	Rs.		Rs.
To Stack Reserve (see note)	4,000	By Net Profit as per Dept. Trnding and P & L A/c	
To Net Profit (to Capital A/c)	46,000	X Dept.	36,000
		Y Dept.	14,000
	50,000		50,000

Note :The stock Reserve relates to the unrenlised profit on unsold stock of Rs. 20,000 with Department Y out of the goods supplied by X. The amount has been calculated as under :

$$20,000 \times \frac{25}{125} = \text{Rs. } 4,000$$

Illustration 6

A firm had two departments, cloth and ready-made garments. The garments were made by the firm itself out of cloth suppliecl by the cloth department nt its selling price, From the following figures prepare Departmental Trading and Profit & Loss Account for the year 1997.

	Cloth Department	Ready-made Garments
	Rs.	Rs.
Opening Stock on 1.1.1997	6,00,000	1,00,000
Purchases	40,00,000	30,000
Sales	44,00,000	9,00,000
Transfer to Ready-made Garments Department	6,00,000	–
Expenses – Manufacturing	–	1,20,000
– Selling	40,000	12,000
Stock on 31.12.1997	4,00,000	1,20,000

The stocks in the ready-mnde garments department may be considered as consisting of 75% cloth and 25% other expenses. The cloth department earned gross profit at the rate of 15% in 1996. General expenses of the business as a whole came to Rs, 2,20,000.

Solution

Departmental Trading and Profit & Loss Account
for the year ending December 31, 1997

	Cloth	Ready-made Garments	Total		Cloth	Ready-made Garments	Total
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
To Opening Stock	6,00,000	1,00,000	7,00,000	By Sales	44,00,000	9,00,000	53,00,000
To Purchases	40,00,000	30,000	40,30,000	By Transfer to Ready-made Garments Dept.	6,00,000		6,00,000
To Transfer from Cloth Dept.		6,00,000	6,00,000	By Closing Stock	4,00,000	1,20,000	5,20,000
To Mfg. Exp.		1,20,000	1,20,000				
To Gross Profit c/d	8,00,000	1,70,000	9,70,000				
	54,00,000	10,20,000	64,20,000		54,00,000	10,20,000	64,20,000
To Selling Exp.	40,000	12,000	52,000	By Gross Profit b/d	8,00,000	1,70,000	9,70,000
To Net Profit c/d	7,60,000	1,58,000	9,18,000				
	8,00,000	1,70,000	9,70,000		8,00,000	1,70,000	9,70,000
To Gen. Exp.			2,20,000	By Net Profit b/d			9,18,000
To Stock Reserve (cl. stock)			14400	By Stock Reserve (op. stock)			11,250
To Net Profit			6,94,850				
		9,29,250				9,29,250	

Note : Stock Reserve has been calculated as follows :

Rate of Gross Profit on Sales in Cloth Debt.

$$\frac{8,00,000}{50,00,000} \times 100 = 16\%$$

Element of cloth in closing stock of Garments

75% of Rs. 1,20,000 = Rs. 90,000.

Unrealised Profit = $\frac{16}{100} \times 90,000$ = Rs. 14,400

Unrealised Profit in opening stock of Garments

$$\frac{15}{100} \times \frac{75}{100} \times 1,00,000 = \text{Rs. } 11,250$$

3.7 LET US SUM UP

When a number of departmental units comprise a single business operation, it is always useful to follow departmental accounting system so as to find out the profit or loss of each department separately. This assists the process of effectiveness in control and improvement in profitability.

In order to record the transactions under departmental accounts, the major tasks are as follows :

a) to maintain subsidiary books in a columnar form;

b) to prepare departmental trading and profit & loss account for ascertaining the profit or loss for each department separately;

c) to effect allocation of various expenses of the business among the different departments on some rational basis;

d) to make appropriate adjustments for goods and services transferred from one department to another; and

e) to keep suitable provision for unrealised profit on departmental stock at the time of obtaining periodical results if the inter-departmental transfer has been done at a profit.

Departmental accounts, thus, help in a more efficient management of business through separate departmental figures relating to its various areas of operation during an accounting period.

3.8 KEY WORDS

Allocation : Apportionment of expenses between different departments of the business on some rational basis.

Transfer Price : The price at which inter-departmental transfer is recorded which may be the cost or the cost plus a margin of profit.

Stock Reserve : reserve created for adjustment of unrealised profit on stock.

Inter-Departmental Transfers : One department of a business supplying its goods or services to another department of the business,

Unrealised Profit : Profit included in the value of goods remaining unused or unsold out of those supplied by another department at cost plus profit.

3.9 ANSWERS TO CHECK YOUR PROGRESS

A 1) only (g) is FALSE

B 1) (i) True (ii) False (iii) True (iv) True

2) (i) a (ii) b (iii) c (iv) b (v) b (vi) a

3.10 TERMINAL QUESTIONS/EXERCISES

Questions

1) What do you mean by Departmental Accounts ? Why are they considered necessary ?
2) What are the advantages of Departmental Accounts ? Explain briefly,
3) Explain the bases of allocation of common expenses among various departments.
4) How are inter-departmental transfers of goods treated in Departmental Accounts ?
5) What is unrealised profit ? Show how it is worked out and accounted for.

Exercises

1) From the following figures relating to Mandakini Traders which has three operating departments prepare Departmental Trading Account.

Units

	Pen	Paper	Rook
Purchases	1000	2000	2400
Stock (Opening)	120	80	152
Sales	1020	1920	2496

The total cost of purchases was Rs, 1,00,000, The selling price for the three departments were as follows :

Pen @ Rs. 20 each

Paper @ Rs, 22.50 each

Book @ Rs. 25 each

The purchase and sale prices are constant for the last two years.

Hint : Assuming all the units purchased were sold at their respective departmental selling prices, the total gross profit would work out to Rs. 25,000. Based on this, the gross profit rate would be 20% and the cost per unit for Pen, Paper and Book Rs. 16, Rs. 18 and R. 20 respectively.

(Answer : Gross Profit : Pen Rs. 4,080; Paper Rs. 8,640; and Book Rs. 12,480).

2) Glamour Stores has three departments — Plastic, Glass and Steel. From the following figures, prepare Departmental Trading and Profit & Loss Account showing Gross Profit and Net Profit for the three departments for the quarter ended March 31, 1998 :

	Plastic Rs.	Glass Rs.	Steel Rs.
Stock (1st January, 1998)	30,000	35,000	15,000
Purchases (upto March, 1998)	35,000	37,500	23,500
Sales (upto March, 1998)	60,000	50,000	30,000
Direct Expenses (upto March, 98)	10,000	7,250	3,550

It was difficult to take stock on March 31, 1998. The normal rates of Gross Profit for the three departments are 40%, 30% and 20% on turnover respectively. Indirect expenses are charged in proportion to departmental turnover. The total indirect expenses for the period were Rs. 7,000.

(Answer : (Gross Profit — Plastic Rs. 24,000; Glass Rs. 15,000 and Steel Rs. 6,000. Net Profit — Plastic Rs. 21,000, Glass Rs. 12,500 and Steel Rs. 4,500)

3) Prepare the Departmental Trading and Profit & Loss Account of Kamalaya Stores on the basis of the following information :

	Department A Rs.	Department B Rs.	Department C Rs.
Opening Stock	41,000	34,000	94,000
Closing Stock	33,000	44,000	82,000
Purchases	2,10,000	75,000	1,39,000
Purchases Returns	14,000	6,000	2,000
Sales	4,00,000	1,54,000	3,62,000
Sales Returns	Nil	3,300	11,000
Wages	73,000	30,000	25,000

Goods were transferred from one department to another at cost price as under :

(i) A to B Rs. 400 and A to C Rs. 7,000; (ii) B to A Rs. 5,000 and (iii) C to A Rs. 4,000 and C to B Rs. 6,000.

Apportion equally Stationery Rs. 900; Postage Rs. 600, General Charges Rs. 39,000, Insurance Rs. 1,800 and Depreciation Rs. 6,000.

The expenditure on rent and rates amounting to Rs. 45,000 is to be divided on the basis of space occupied i.e., A 4 B 2 and C 3.

Allocate the following expenditure as you think best and append notes, stilting the basis selected for each of them; Establishment R. 63,000; Bad Debts Rs. 15,000; Advertising Rs. 9,000 and Income-tax Rs. 12,000.

(Answer : (Profit A Rs. 1,21,400; B Rs. 60,300; C Rs. 1,80,000. Net Profit : A Rs. 55,169; B Rs. 29,622; C Rs. 1,19,709. Establishment, Bad Debts and Advertising Expenses have been apportioned in proportio to net sales; and Income-tax has been allocated according to net profits i.e., A 58,406; B 31,360; C 1,26,734).

4) Five Star Dresses run two departments — Cloth Department and Shirts Department. Shirts are made by the firm out of clotl1 supplied by the Cloth Department at its usual selling price.

From the following figures, prepare Departmental Trading and Profit & Loss Account for the year 1997 :

	Cloth Department Rs.	Shirts Department Rs.
Opening Stock	2,40,000	48,000
Purchases	18,00,000	24,000
Sales	20,00,000	6,00,000
Transfer to Shirts Dept.	4,00,000	
Manufacturing Expenses		68,000
Selling Expenses	40,000	4,000
Closing Stock	3,00,000	60,000

The stock in the Shirts Department may be considered as consisting of 80% cloth and the rest as expenses. The Cloth Department made a Gross Profit of 25% in 1996. Cieneral Expenses of the business as a whole came to Rs. 1,80,000.

(**Answer** : Cloth Department Gross Profit Rs. 6,60,000; Net Profit Rs. 4,72,400.
Shirts Department Gross Profit Rs. 1,20,000; Net Profit Rs. 80,000).

5) From the following figures relating to Kavita Enterprises, prepare Departmental Trading Account and General Profit and Loss Account for the year ended 31st March, 1998 and a Balance Sheet as on that date after adjusting the unrealised departmental profits, if any :

	Dr. Rs.	Cr. Rs.
Capital		3,00,000
Land & Buildings	1,25,000	
Furniture	25,000	
Opening Stock :		
Department A	30,000	
Department B	40,000	
Purchases :		
Department A	10,00,000	
Department B	15,00,000	
Sales :		
Department A		20,00,000
Department B		32,00,000
General Expenses	14,00,000	
Sundry Debtors	2,00,000	
Sundry Creditors		1,00,000
Drawings	2,80,000	
Cash at Bank	10,00,000	
	Rs. 56,00,000	Rs. 56,00,000

Additional **Information**

1) **Closing Stock :** Department A lis. 1,30,000 including goods from Department B Rs. 40,000 at cost to Department A. Department B Rs. 2,60,000 including goods from Department A Rs. 90,000 at cost lo Department B.

2) Sales of Department **A** include transfer of goods to Department B of the value of Rs. 2,00,000 and Sales of Department B include transfer of goods lo

Department A of the value of Rs. 3,00,000 both at market price of transferor departments. These are already included in purchases of respective departments.

3) Opening Stocks of Department A and Department B include goods of the value of Rs. 10,000 and Rs. 15,000 taken ti-om Deparunent B and Department A respectively at cost to transferor departments.

4) Depreciate Land and Buildings by 5% and Furniture by 10% per annum.

(Answer : Gross Profit : A Rs. 11,00,000; B Rs. 19,20,000. Stock Reserve : A Its. 49,500; B Rs. 24,000. Net Profit : Ks. 15,37,750. Balance Sheet Total Rs. 16,57,750).

5) From the following particulars of Niharika Associates which has three Departments A, B and C, prepare Departmental Trading and Profit & Loss Account :

	Department A Rs.	Department B Rs.	Department C Rs.
Opening Stock	3,000	4,000	6,001)
Consumption of Direct Materials	8,000	12,000	
Wages	5,000	10,000	
Closing Stock	4,000	14,000	8,000
Sales			34,000

Stocks of each department are valued at cost to the departments concerned. Stocks of Department A are transferred to B at a margin of 50% above departmental cost. Stocks of Department B are transferred to Department C at a margin of 10% above departmental cost.

Other expenses were :

Salary	2,000
Printing	1,000
Rent	6,000
Interest Paid	4,000
Depreciation	3,000

Allocate expenses in the ratio of departmental gross profits. Opening figures for reserve of unrealised profits on departmental stocks were :

Department B	Rs. 1,000
Department C	Its. 2,000

(Answer : Net Loss : Department A Rs, 2,000, Department B Rs. 1,000 and Department C Rs. 1,000. Total Net Loss after adjustments for Stock Reserve Rs. 4,918).

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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 for assessment. These are for your practice only.

SOME USEFUL BOOKS

Maheshwari, S.N., 1998 : *Introduction to Accounting* Vikas Publishing House, New Delhi. (Chapters 4 & 5, Section II).

Gupta R.L. and M. Radhaswamy, 1998. *Advanced Accounting Sultan* Chand & *Sons,* New Delhi (Chapters 19 & 20).

Shukla, M.C., Grewal, T.S. & S.C. Gupta, 1998 : *Advanced Accounts* S. Chand & Co. Ltd., New Delhi, Chapter 11.

Monga J.R., Ahuja G.C. & Ashok Sehgal, 1998 : *Advanced Accounting* National Publishing House, New Delhi.