#### DEPARTMENTAL ACCOUNTING

#### A. Department:

Department refers to activity centre (profit or cost centre) usually located in the same roof but carrying distinct type of activities.

#### **B.** Departmental

#### Accounting:

Department accounting or departmental accounting is a system of financial accounting which is used in the organizations whose all works are done through their different departments or departmental stores. Departmental accounts are prepared separately for each department and trial balance will also be prepared. Departmental P&L Account is prepared to ascertain the profit or loss of each department separately and at the end of the year it is transferred to General profit and loss account of the whole organisation.

### C. Objectives of departmental accounting:

The main objectives of departmental accounting are:

a) To have comparison of the results of a particular department with previous year and also with the other departments of

the same concern;

b) To help the proprietor in formulating policy to expand the business on proper lines so as to optimize the profits of the

concern;

c) To allow departmental managers' commission on the basis of the profits of their departments; and

d) To generate information, which may be helpful for planning, control, and evolution of performance of each department and for taking various managerial decisions.

#### **D.** Advantages of Department Accounts:

The main advantages of Departmental accounting are as follows:

a) It provides an idea about the affairs of each department.

b) It helps to evaluate the performance of each department.

c) It helps to reward the Departmental mangers and staff on the basis of performance.

d) It facilitates control over the working of each department.

e) It helps to compare the result of one department with those of other departments.

f) It helps the management to formulate the right business policies for the various departments.

g) It will help in the preparation of departmental budgets.

h) It helps to calculate stock turnover ratio of each department.

There are two methods that are used in departmental accounting: -

- 1. Where a separate set of books is maintained for every department.
- 2. Where all departmental accounts maintain columnar-wise collectively.

# **E.** Methods of Departmental Accounting:

# Where individual set of books is maintained

It is method under which every branch of an organization is regarded as separate unit and therefore individual book of accounts are prepared and maintained for every unit. At the end, financial result of every department is calculated and consolidated to find the overall performance and net result of whole organization.

This method of departmental accounting involves huge costs and is preferred only by large scale organizations or where is required by the law. Companies involved in insurance business are the one which are compulsorily required to implement this system of accounting.

## Where all departmental accounts are maintained columnar-wise collectively

Under this technique of departmental accounting, accounts of all branches are maintained collectively in columnar form by central accounts department. In this method for every department a departmental trading and profit and loss account is opened in columnar way altogether. There is a separate column for "Total" for finding out the results of different departments both on individual and collective basis. Balance sheet is however prepared in a combining form.

For incorporation of purchase and sale of goods, a subsidiary book of accounts is prepared with different columns for different departments. Various subsidiary books prepared are Purchase book, Sales book, Purchase return and Sales return book. Cash book with separate columns of cash purchase and cash sale is also maintained in case of large volumes of purchase and sales done on cash basis.

## **F. Inter-departmental transfers:**

Inter-departmental transfers are made on the following basis:

#### INTER-DEPARTMENTAL TRANSFER AT COST PRICE

The price at which one department supplies goods to another department or when some services are rendered by department to the another department is known as Transfer Price. It refers to the charge made for goods and services sold internally. It may be market price if one is available. The transfer price is adjusted with the following amounts:

• Cash discount

- Selling costs (not in internal transfers)
- Margin of profit
- Standard costs.

Recording inter-departmental transfers helps the management in setting up profit centres, fixing responsibility on departmental managers and eventually, evaluates the performance and efficiency of the concerned departments.

#### STANDARD COST BASED TRANSFER PRICE

Under this method of pricing the prices may be based on the actual cost or total cost or standard cost or marginal cost. Standard cost is preferred to actual cost as the efficiency of one department is not allowed to pass to another department. When goods are transferred at cost, the fixed cost of supplying department becomes the variable cost of the receiving department.

#### INTER-DEPARTMENTAL TRANSFER AT SALE OR INVOICE PRICE

The goods may also be transferred from one department to another at sale or invoice price. The department which transfers the goods is known as Transferor department and the department to which goods are transferred is known as Transferee department. In this case, the transferor department retains the normal profit and does not allow the transferee department to increase its profit at the cost of the transferor.

When the goods received are sold out, the load or profit retained by the transferor department becomes the actual profit realized.

But if the goods remain unsold, then there will be unrealized profit in the closing stock. Unrealized profit is the difference between transfer price and the cost price of unsold stock. These reserves are created as follows:

## FOR CLOSING STOCK

General Profit and Loss A/c Dr. To stock reserve A/c

## AT THE BEGINNING OF THE YEAR

Stock reserve A/c Dr. To General profit and loss A/c

## Question

# 1.

Z & Co. has two departments. They maintain separate records for each department. You are

requested to prepare the Trading A/c and Profit & Loss A/c of each department and a Balance Sheet for the year ended on 31st March, 1989 on the basis of the following information

	Dept.	I Dept. II	Other Balances
Opening Stock (1.4.88),	25,000	20,000	
Purchases	2,30,000	1,90,000	
Purchase Returns	2,000	1,000	
Sales	6,33,000	4,92,000	
Sales Returns	3,000	2,000	
Wages & Salaries	1,80,000	1,60.000	
Miscellaneous Charges	35,000	32,000	
Closing Stock on 31.3.89	26,000	24,000	
Sundry Debtors			1,90,000
Sundry Creditors			1.73,000
Plant & Machinery			2.40.000
Leasehold Land			80,000
Buildings			1,20,000
Furniture & Fittings			48,000
Selling Expenses and other overhead			1,28,000
expenses			
Cash in hand on 31.3.89			8,000
Cash at Bank on 31.3.89			1,10,000
Proprietors Capital A/c			5,00,000

Depreciate Plant & Machinery by 33— 3 %, Building by 5% and Furniture & Fittings by 10%. All unallocated expenses are to be allocated on the basis of net sales of each department.

**Question 2**. M/s Z & Co. has two departments. You are requested to prepare the Trading and profit & Loss Account for each department for the year ended on 31<sup>st</sup> March, 1993 on the basis of the following information:

Particulars		Dept. 1	Dept. 2
		₹	₹
Opening	stock		
(1.4.92)		25000	20000
Purchases		230000	190000
Sales		633000	492000
Sales Returns		3000	2000

Closing	Stock		
(31.3.93)		30000	18000
Wages		80000	60000
Salaries		40000	25000

Other common expenses: Selling Expenses- ₹8000 Depriciation- ₹18000 Electricity- ₹6000

Rent- ₹15000

Some other relevant information are given below:

	Dept 1	Dept 2
Light Points	18	9
Value of Assets (₹)	150000	120000
Floor Area (sq. ft)	300	200

**Question 3.** S Brothers are leading paper merchants and book sellers. Their wholesale business is in- paper and their retail show room -conducts business in stationery, books and magazines. The following balances are abstracted from their books at the end of their financial year, 3Ist March, 1997.

	₹		₹
Capital	300000	Rent	60000
Stock (1-4-			
1996)		Lighting	24000
Paper	200000	Showroom Maintenance	18000
Stationary	50000	Showroom Fittings	180000
Books	100000	Sundry Debtors (for Paper)	100000
Magazines	25000	Sundry Creditors	150000
Purchases:		Salaries:	
Paper	800000	showroom staff	36000
Stationary	300000	Wholesale Business Staff	12000
Books	350000	Showroom Cashier	12000
Magazines	300000	General Office Expenses	44000
Sales:		General Office Salaries	11000
Paper	1000000	Cash and Bank Balances	8000
Stationary	360000		
Books	420000		
Magazines	420000		

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

(i) Closing balance at the end of the year in the various departments were: Paper Z 1, 80,000; Stationery Z 40,000; Books Z 1, 20,000 and Magazines T 30,000.

(ii) Rent and Lighting are for premises taken on lease, General Office accommodation is negligible. Wholesale department uses 1,500 sq. ft. The balance of 1,500 sq., feet is occupied by the showroom with equal division among stationery, books and magazines.

(iii) Showroom fittings are to be depreciated by 10% p.a.

**Question 4.** M/s ABC carried on business as Departmental Stores in Calcutta. The partners A, B, C were in charge of Departments X, Y and Z respectively. The partners are entitled to a remuneration equal to 50 % of the profits (without taking the partners remuneration into consideration) of the respective departments of which they are in-charge and the balance of the profits are to be distributed among A, B and C in the ratio of 5:3:2. The following are balance of the revenue items in the books for the year 31.3.1994:

	Departments		
Particulars	X (₹)	Y (₹)	Z (₹)
Opening Stock	151560	96000	80000
Purchases	562800	332400	177600
Sales	720000	540000	360000
Closing Stock	180320	69920	96360
Other Revenue Items:			
Salaries and Wages	192000		
Discount Allowed	5400		
Advertising	9000		
Discount Received	3200		
Rent	43200		
Sundry Expenses	48600		
Depreciation on Furniture & Fittings	3000		

(a) Prepare the Departmental Trading and Profit & Loss Account for the year ended 31.3.94.

(b) Show the distribution of profits amongst the partners after taking into account the following:

(i) Goods having a transfer price of ₹42800 and ₹2400 were transferred from Department X and Y respectively to department Z. The inter-departmental transfers are made at 125% of the cost.

(ii) The various items shall be apportioned amongst the three Departments in the following proportions:

	Departments					
Particulars	X Y Z					
Rent	2	2	5			
Salaries	1	1	1			
Depreciation	1	1	1			
Discount						
Received	8	5	3			

All other expenses: on the basis of sales (excluding inter-departmental transfers) of each department. The opening stock of Department Z does not include goods transferred from other Department but the Closing Stock include ₹34200 valued at the inter-departmental transfer prices.

**Question 5.** The directors of Departmental Stores Limited wish to ascertain approximately, the net profit of "A", "B" and "C" departments separately for the quarter ended March 31. 1997. It is found impracticable actually to take stock on that date but an adequate system of departmental accounting is in use and the normal rates of gross profit, for the departments concerned, are 40%, 30% and 20% on turnover respectively. Indirect expenses are charged in proportion to departmental turnover.

	Departments			
Particulars	A (₹)	B (₹)	C (₹)	
Stock on 1.1.1997	30000	35000	15000	
Purchases to March 31,				
1997	35000	37500	23500	
Sales to March 31,1997	60000	50000	30000	
Direct Expenses	10100	7250	3550	

Following are the figures for each department:

Total indirect expenses for the period (including those related to other departments) were ₹21000 on total sales of ₹420000.

Prepare a statement showing gross profit, net profit after making reserve for stock at 10% in respect of each department.

#### Solution 1

In the books of Z & Co							
Departmental Tradir	Departmental Trading and P&L Account for the year ended 31-03-1989						
Dr			Cr				
Particulars	Dept 1	Dept 2	Particulars	Dept 1	Dept 2		
To Opening Stock	25000	20000	By sales	630000	490000		
To Purchases	228000	189000					
To wages and Salries	180000	160000					
To Gross Profit	223000	145000	By Closing Stock	26000	24000		
Total	656000	514000	Total	656000	514000		
			By Gross Profit	223000	145000		
To S&D Expense	72000	56000					
To Misc. Expenses	35000	32000					
To Depn on Building	3375	2625					
To Depn on P&M	45000	35000					
To Depn on Furniture	2700	2100					
To General P&L	64925	17275					
Total	223000	145000		223000	145000		

In the books of Z & Co	
Balance Sheet as on 31st March 1989	

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital	500000		Leasehold Land		80000
Add: Net Profit			Building	120000	
Dept-1	64925		Less: Depriciation	6000	114000
Dept-2	17275	582200			
			Plant & Macinery	240000	
			Less: Depriciation	80000	160000
Sundry Creditors		173000			
			Furniture & Fittings	48000	
			Less: Depriciation	4800	43200
			Stock		50000
			Sundry Debtors		190000
			Cash-at-Bank		110000
			Cash-in-Hand		8000
Total		755200	Total		755200

#### Solution 2

In the books of Z & Co							
Departmental Trading and P&L Account for the year ended 31-03-1993							
Dr			Cr				
Particulars	Dept 1	Dept 2	Particulars	Dept 1	Dept 2		
To Opening Stock	25000	20000	By sales	630000	490000		
To Purchases	230000	190000					
To Wages	80000	60000	By Closing Stock	30000	18000		
To Gross Profit	325000	238000					
Total	660000	508000	Total	660000	508000		
			By Gross Profit	325000	238000		
To Salaries	40000	25000					
To Rent	9000	6000					
To Electricity	4000	2000					
To Depriciation	10000	8000					
To Selling Expense	4500	3500					
To General P&L	257500	193500					
Total	325000	238000	Total	325000	238000		

In the Books of S. Brothers											
Departmental Trading and Profit & Loss											
Particulars	Paper	Stationary	Books	Magazine	Particulars	Paper	Stationary	Books	Magazine		
To op Stock	200000	50000	100000	25000	By Sales	1000000	360000	420000	420000		
To purchases	800000	300000	350000	300000	By cl. Stock	180000	40000	120000	30000		
To Gross Profit	180000	50000	90000	125000							
Total	1180000	400000	540000	450000	Total	1180000	400000	540000	450000		
					By Gross						
					Profit	180000	50000	90000	125000		
To Rent (3:1:1:1)	30000	10000	10000	10000							
To lighting (floor area)	12000	4000	4000	4000	· '		'				
To showroom											
Maintenance		6000	6000	6000							
To depriciation		6000	6000	6000							
To salaries showroom		10800	12600	12600							
To Salaries Wholesale	12000										
To salaries Cashier		3600	4200	4200							
To General Office	5000	1800	2100	2100							
To General office											
Expenses	20000	7200	8400	8400							
To Net Profit	101000	600	36700	71700							
Total	180000	50000	90000	125000	Total	180000	50000	90000	125000		

#### Solution 4

In the books of M/S ABC										
Departmental trading and Profit& Loss Account for the year 31-03-1994										
Dr							Cr			
Particulars	Dept. X (₹)	Dept. Y (₹)	Dept. Z (₹)	Particulars	Dept. X (₹)	Dept. Y (₹)	Dept. Z (₹)			
To opening Stock	151560	96000	80000	By Sales	720000	540000	360000			
To Purchases	562800	332400	177600	By Dept Z	42800					
To Dept Z			42800	By Dept Z		2400				
Dept X			2400							
DeptY				By Closing Stock	180320	69920	86360			
To Gross Profit c/d	228760	183920	143560							
Total	943120	612320	446360	Total	943120	612320	446360			

				By Gross Profit b/d		228760	183920	143560
				Ву	Discount			
To Salaries & Wages	64000	64000	64000	Received		1600	1000	600
To Rent	9600	9600	24000					
To Depreciation	1000	1000	1000					
To Discount Allowed	2400	1800	1200					
To Advertising	4000	3000	2000					
To sundry Expenses	21600	16200	10800					
To General P&L	127760	89320	41160					
Total	230360	184920	144160	Total		230360	184920	144160

Profit and Loss Appropriation Acc	oun	t for the ye	ar ended 3	1-03-01994		
Dr						Cr
Particulars		Amount	Amount	Particulars	Amount	Amount
To Remuneration to Partners				To P&L Appropriation A/C		251400
A: 50% of ₹127760		63880				
B: 50% of ₹183920		44660				
C: 50% of ₹41160		20580	129120			
To Balance c/d			122280			
Total			251400	Total		251400
				By Balance b/d		122280
To Parners capital						
(share of profit)						
A:		61140				
B:		36684				
C:		24456	122280			
Total			122280	Total		122280

#### Solution 5

# Departmental Trading and Profit & Loss Accounts for the year ended 31-03-1997

Dr.							Cr.
Particulars	Dept A (₹)	Dept B (₹)	Dept C (₹)	Particulars	Dept A (₹)	Dept B (₹)	Dept C (₹)
To Opening Stock	30000	35000	15000	By Sales	60000	50000	30000
To Purchases	35000	37500	23500				
To Direct Expenses	10100	7250	3550	By Closing Stock	39100	44750	18050
To Gross Profit	24000	15000	6000	(Balancing figure)			
Total	99100	94750	48050	Total	99100	94750	48050
				By Gross Profit	24000	15000	6000
To Indirect							
Expenses	3000	2500	1500				
To Stock Reserve	3910	4475	1805				
To General P&L	17090	8025	2695				
(Net Profit							
Transfer)							
Total	24000	15000	6000	Total	24000	15000	6000

General Profit and Loss Account for the year ended 31-03-1994								
Dr						Cr		
Particulars	Amount	Amount	Particulars		Amount	Amount		
To Provision on Stock		6840	By Departmental Trading and P&L					
			Dept X		127760			
			Dept Y		89320			
			Dept Z		41160	258240		
To P&L Appropriation A/C		251400						
Total		258240	Total			258240		