## Study Unit 1: Departmental Accounting

## Learning objectives

1. To enable the trading results of each department, to be more accurately ascertained for analysis of turnover, as well as profit or loss.
2. To maintain and keep an adequate check on the goods or stock and cash held by managers and supervisors of each department, and to ensure that such a case is fully accounted for.
3. To control the activities of the departmental managers and staff.
4. To provide factual and useful information on each department, in order to facilitate more effective control and supervision.

## Introduction

Departmental accounting is a system of accounting used to account and present the financial activities of each department and the entity as a whole. The activities of a business may be segmented into departments based on the classes of goods handled or on the kind of duties performed. Each department is run by a manager or supervisor.

## Advantages of departmental accounts

i. It is easy to compare the contribution to total profit made by each department by simply calculating the percentage of gross profit on sales for each department.
ii. It quickly reveals loss making departments which may be closed down or may be re-organised more efficiently.
iii. Provides financial accounting information for comparing results of different departments for different years.
iv. Easy to ascertain the profitability of each department.
v. Provides a means of controlling departmental sales and profits.
vi. Serves as a moral booster especially where the departmental managers and supervisors are remunerated on the basis of their results.
vii. Stimulates healthy competition among departments which leads to efficiency in managing the business.

## Disadvantages of departmental accounts

Leads to extra costs in terms of hiring extra staff to analyse and maintain additional ledger accounts.

May lead to unhealthy competition and friction among departmental managers, supervisors and staff if they are not guided.

## Apportionment of overhead expenditure to departments

A lot of expenses are incurred and paid for departments in a business as a whole without a clear distinction as to which department such expenditure has been incurred. The kind of expenditure shared among departments involve overhead items which include, repairs, office expenses, printing, postage and stationery, wages and salaries, rates, lighting and heating, discounts allowed, bank charges etc. such expenses are difficult to most accurately and equitably allocate the expenditure to a particular department. The following are guidelines used in apportioning such expenditure.

## Direct apportionment

Expenses directly incurred primarily on behalf of any department should be charged to that particular departments. Carriage, repairs, printing and stationery, wages and salaries are apportioned on a direct basis.

Floor space apportionment
Expenditure chargeable against the business generally may be apportioned to departments according to the relative effective space each department occupies. Items of expenditure most suitably apportioned by floor space analysis include, rent, rates, lighting, heating etc.

## Turnover apportionment

Expenses may also be allocated to departments, in proportion to the turnover of each department. This is suitable for expenditure items such as discounts allowed, advertising and general sales and promotions etc.

## Example one

Mr. Bruce is a proprietor of a shop selling paintings and ornaments. For the purposes of his financial statements he wishes the business to be divided into two departments.

Department A Paintings
Department B Ornaments
The following balances have been extracted from his nominal ledger at $31^{\text {st }}$ august 2005.

| Dr | Cr |
| :--- | :--- |
| $\$$ | $\$$ |

Sales Department A 75,000

Sales Department B 50,000

Stock Department A, 1 September 2004 1,250
Stock Department B, 1 September 2004 1,000
Purchases Department A 51,000
Purchases Department B 38,020
Wages of sales assistants Department A 7,200
Wages of sales assistants Department B 6,800
Picture framing costs for dept A 300
General office salaries 13,200
Fire insurance-buildings 360
Lighting heating 620
Repairs to premises 175
Internal telephone ..... 30
Cleaning ..... 180
Accountancy charges ..... 1,490
General office expenses ..... 510
Additional information

Stocks at $31^{\text {st }}$ August 2005 were valued at:
Department A \$ 1,410
Department B \$ 912
The proportion of the total floor area occupied by each department was:
Department A two-fifths
Department B three-fifths
Note: the apportionment should be made using the methods as shown below:
Area-fire insurance, lighting and heating, repairs, telephone, cleaning.
Turnover-general office salaries, accountancy, general office expenses

## Required

Prepare Mr. Bruce's trading and profit and loss account for the year ended $31^{\text {st }}$ August 2005, apportioning the costs, where necessary, to show the department profit or loss.

## Working

## Area apportionment

Department A
Department B
Fire insurance $2 / 5 \times 360=144$
Lighting and heating $2 / 5 \times 620=248$
Repairs and premises $2 / 5 \times 175=70$
Telephone $2 / 5 \times 30=12$
cleaning $2 / 5 \times 180=72$
$3 / 5 \times 360=216$
$3 / 5 \times 620=372$
$3 / 5 \times 75=105$
$3 / 5 \times 30=18$
$3 / 5 \times 180=108$

## Turnover apportionment

total turnover for department $A \& B=75,000+50,000=125,000$ Apportionment using turnover

## Department A

General office salaries
$75,000 / 125,000 \times 13,200=7,920$
Accountancy
$75,000 / 125,000 \times 1,490=894$
General office expenses
$75,000 / 125,000 \times 510=306$

## Department B

General office salaries
Accountancy
$50,000 / 125,000 \times 1,490=596$
General office expenses
$50,000 / 125,000 \times 510=204$

## Solution

|  |  | A |  | B |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ |
| Sales |  | 75,000 |  | 50,000 |
| Less: Cost of sales |  |  |  |  |
| Opening stock | 1,250 |  | 1,000 |  |
| Add purchases | 51,000 |  | 38,020 |  |
| Goods available for sale | 52,250 |  | 39,020 |  |
| Less: Closing stock | $(1,410)$ |  | (912) |  |
| Cost of sales |  | $(50,840)$ |  | $(38,108)$ |
| Gross profit |  | 24,160 |  | 11,892 |
| Less: Expenses |  |  |  |  |
| Wages | 7,200 |  | 6,800 |  |
| Picture framing costs | 300 |  | 0 |  |
| General office salaries | 7,920 |  | 5,280 |  |
| Fire insurance | 144 |  | 216 |  |
| Lighting and heating | 248 |  | 372 |  |
| Repairs | 70 |  | 105 |  |
| Telephone | 12 |  | 18 |  |
| Cleaning | 72 |  | 108 |  |
| Accountancy charges | 894 |  | 596 |  |

General office expenses
Net Profit/Loss
$\underline{(17,166)}$
$\underline{6,994}$$\quad \underline{(13,699)}$

## REVISION EXERCISE

## Example 2

The following information relates to Nyagatare Stores and has three departments

|  | (a) | (b) | (c) |
| :--- | :--- | :--- | :--- |
|  | $\$$ | \$ | $\$$ |
|  | Jewelry | Hair Dressing | Clothing |
| Stock at $1^{\text {st }}$ January 2008 | 20,000 | 15,000 | 30,000 |
| Purchases | 110,000 | 30,000 | 150,000 |
| Stock at 31 st December 2008 | 30,000 | 25,000 | 40,000 |
| Sales | 180,000 | 90,000 | 270,000 |
| Wages of assistants | 28,000 | 50,000 | 60,000 |

The following expenses cannot be traced to any particular department.

| Rent | 8,200 |
| :--- | :---: |
| Administration expenses | 48,000 |
| Air conditioning and lighting | 6,000 |
| General expenses | 2,400 |

It is decided to apportion the cost of rent together with air conditioning and lighting in accordance with floor space occupied by each department. These were taken up in the ratios of; (a)1/5, (b) $1 / 2$ and (c) 3/10. Administration expenses and general expenses are to be split in the ratio of sales.

## Tutor marked assignment study unit 1

a) State the objectives of departmental accounting.
b) The proprietor of a large retail store wished to ascertain approximately the net profit of the $\mathrm{X}, \mathrm{Y}$ and Z departments separately for the three months ended 31st March 2006. 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 three departments concerned are respectively $40 \%, 30 \%$ and $20 \%$ on turnover before charging the direct expenses. The indirect expenses are charged in proportion to departmental turnover.

The following are the figures for the departments:

|  | X <br> Rs. | Y | Z <br> Rs. |
| :--- | ---: | ---: | ---: |
| Opening stock (1-1-2006) | 10,000 | 14,000 | 7,000 |
| Purchases | 12,000 | 13,500 | 9,700 |
| Sales | 20,000 | 18,000 | 16,000 |
| Direct expenses | 2,000 | 1,500 | 700 |

The total indirect expenses for the period (including those relating to other departments) were Rs. 5,400 on the total turnover of Rs. 1, 08,000. Prepare a statement showing the approximate net profit, making a stock reserve of $10 \%$ for each department on the estimated value on 31-3-2006.

Required: Prepare the Departmental Trading, Profit and Loss Account for the three months ended 31 ${ }^{\text {st }}$ March, 2006.

