Dr.SNS RAJALAKSHMI COLLEGE OF ARTS AND SCIENCE
(Autonomous)

Accredited by NAAC – UGC with 'A+ Grade (Cycle IV)

(Recognized by UGC, Approved by AICTE & Affiliated to Bharathiar University)

Coimbatore- 49

DEPARTMENT OF COMMERCE WITH INFORMATION TECHNOLOGY

21UCR402 – FUNCTIONAL ACCOUNTING

Unit-3: Departmental Accounting – Problems

Ms.S.Meenakshi, Assistant Professor

Department of Commerce with Information Technology

3. There are two departments in a firm X and Y.
Goods are transferred from Dept X to Dept Y at usual selling price. You are required to compute stock reserve on stocks of Dept. Y from the following data.
G.P. Ratio of Dept X : 25% on cost,
Opening stock of Dept Y : Rs.50,000,
Closing stock of Dept Y : Rs.75,000.

Solution:
Convert GP on cost to GP on sales:
GP on cost = 25%
Cost = 100
Profit = 25
Selling Price = 125
GP on sales = 25 / 125 × 100 = 20%

Calculate Stock Reserve:

Opening Stock Reserve (Dept. Y)= 20% of ₹50,000
= ₹10,000

Closing Stock Reserve (Dept. Y) = 20% of ₹75,000
= ₹15,000

Stock Reserve on Opening Stock	10,000
Stock Reserve on Closing Stock	15,000

4. The following purchases were made by a business house having three departments :
    - Dept A - 1000 units,
    - Dept B - 2000 units,
    - Dept C - 2400 Units (all three departments are at a total cost of Rs.1,00,000)

Stocks on 1st Jan were :
    - Dept A - 120 units,
    - Dept - 80 units,
    - Dept C - 152 Units.

Sales were:
    - Dept A - 1020 Units at Rs. 20 each,
    - Dept B - 1920 units at Rs. 22.50 each,
    - Dept C - 2496 units at Rs.22 each.

The rate of gross profit is same in each case. Prepare departmental trading account

Working Notes:

(1) Calculation of Closing Stock (in units)
Opening stock + Purchase − Sales = Closing stock
Dept. A : 120 + 1,000 − 1,020 = **100 units**
Dept. B : 80 + 2,000 − 1,920 = **160 units**
Dept. C : 152 + 2,400 − 2,496 = **56 units**

(2) Calculation of Rate of Gross Profit
Assuming all purchased units are sold:
Dept. A : 1,000 units × 20 = 20,000
Dept. B : 2,000 units × 22.50 = 45,000
Dept. C : 2,400 units × 25 = 60,000
Total Sales = 1,25,000
Less: Total Cost = 1,00,000
Gross Profit = 25,000

Rate of Gross Profit on Selling Price:

Particulars	Calculation	Result
Rate of Gross Profit	25,000 / 1,25,000 × 100	20%
Cost	100% − 20%	80% of Selling Price

(3) Cost Price of Each Unit

Department	Calculation	Cost per Unit (₹)
Dept. A	20 × 80 / 100	16
Dept. B	22.50 × 80 / 100	18
Dept. C	25 × 80 / 100	20

(4) Purchase of Each Department

Department	Units × Cost	Amount (₹)
Dept. A	1,000 units × 16	16,000
Dept. B	2,000 units × 18	36,000
Dept. C	2,400 units × 20	48,000

(5) Sale Proceeds of Each Department

Department	Units × Selling Price	Amount (₹)
Dept. A	1,020 units × 20	20,400
Dept. B	1,920 units × 22.50	43,200
Dept. C	2,496 units × 25	62,400

(6) Value of Opening Stock at Cost

Department	Units × Cost	Amount (₹)
Dept. A	120 units × 16	1,920
Dept. B	80 units × 18	1,440
Dept. C	152 units × 20	3,040

(7) Value of Closing Stock at Cost

Department	Units × Cost	Amount (₹)
Dept. A	100 units × 16	1,600
Dept. B	160 units × 18	2,880
Dept. C	56 units × 20	1,120

Solution:

Departmental Trading Account

Particulars	A (₹)	B (₹)	C (₹)	Particulars	A (₹)	B (₹)	C (₹)
To Opening Stock	1,920	1,440	3,040	By Sales	20,400	43,200	62,400
To Purchases	16,000	36,000	48,000	By Closing Stock	1,600	2,880	1,120
To Gross Profit (Bal. fig.)	4,080	8,640	12,480				
Total	**22,000**	**46,080**	**63,520**	**Total**	**22,000**	**46,080**	**63,520**

THANK YOU