

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

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Coimbatore- 49**

**DEPARTMENT OF COMMERCE WITH INFORMATION  
TECHNOLOGY**

**21UCR402 – FUNCTIONAL ACCOUNTING**

**Unit-3: Departmental Accounting – Problems**

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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 B - 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

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				
<b>Total</b>	<b>22,000</b>	<b>46,080</b>	<b>63,520</b>	<b>Total</b>	<b>22,000</b>	<b>46,080</b>	<b>63,520</b>

## 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  $\times 20 = 20,000$

Dept. B :  $2,000$  units  $\times 22.50 = 45,000$

Dept. C :  $2,400$  units  $\times 25 = 60,000$

**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	$25,000 / 1,25,000 \times 100$	20%
Cost	$100\% - 20\%$	80% of Selling Price

### (3) Cost Price of Each Unit

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

**THANK YOU**