

11. DEPARTMENTAL ACCOUNTS

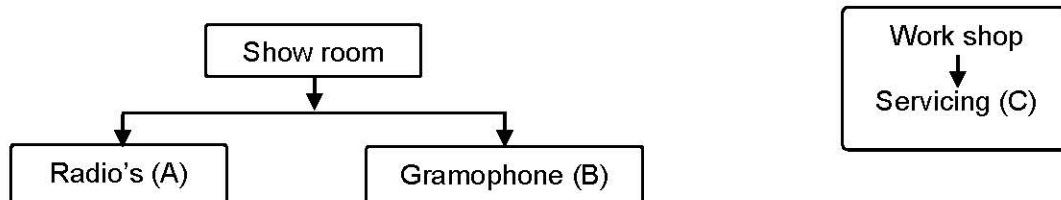
ASSIGNMENT SOLUTIONS

PROBLEM NO: 1

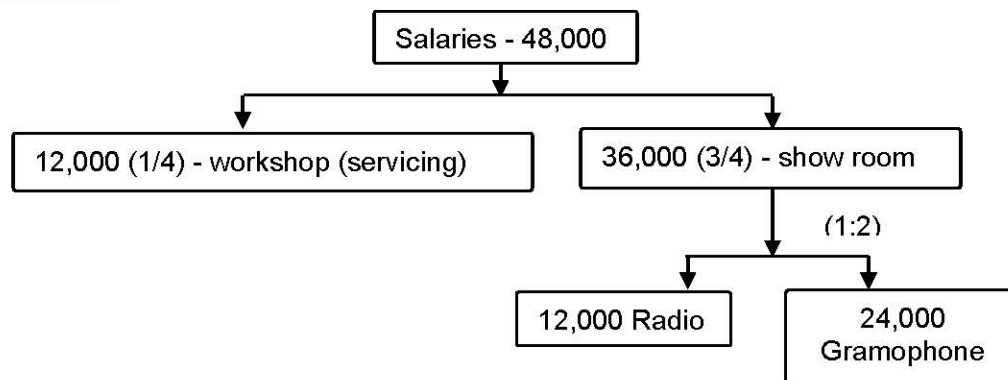
Dr. Department Trading & P & L A/c of Radio & gramophone Equipment Co. Cr.

Particulars	Radio Rs.	Gramophone Rs.	Service Rs.	Particulars	Radio Rs.	Gramophone Rs.	Service Rs.
To Purchases	1,40,700	90,600	64,400	By sales	1,50,000	1,00,000	25,000
To Gross Profit c/d	69,400	29,700	5,200	By Closing Stock	60,100	20,300	44,600
	2,10,100	1,20,300	69,600		2,10,100	1,20,300	69,600
To Salaries (WN-1)	12,000	24,000	12,000	By Gross Profit b/d	69,400	29,700	5,200
To Rent (WN-2)	3,900	3,900	3,000				
To Sundry Expenses (WN-3)	6,000	4,000	1,000				
To Net Profit / Loss	47,500	(2,200)	(10,800)				
	69,400	29,700	5,200		69,400	29,700	5,200

NOTE:



WORKING NOTE 1:



WORKING NOTE 2:

Rent of workshop = 500 p.m. x 6m = 3,000

Actual Rent = 10,800

(-) work shop = 3,000

7,800

Radio Gramophone

3,900 3,900

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Turnover →	A	B	C
	1,50,000	1,00,000	25,000
	6	4	1

WORKING NOTE 3:

Sundry Expresses → $11,000 \times \frac{6}{11}$, $11,000 \times \frac{4}{11}$, $11,000 \times \frac{1}{11}$

- Radio = Rs. $11,000 \times \frac{6}{11}$ = Rs. 6,000
- Gramophone = Rs. $11,000 \times \frac{4}{11}$ = Rs. 4,000
- Service = Rs. $11,000 \times \frac{1}{11}$ = Rs. 1,000

PROBLEM NO: 2

Dr. Trading and Profit and Loss Account for the year ended on 31st March, 2015 Cr.

Particulars	A (Rs.)	B (Rs.)	C (Rs.)	Particulars	A (Rs.)	B (Rs.)	C (Rs.)
To Opening stock	8,500	5,700	1,200	By sales less returns	50,000	30,000	20,000
To Purchases	22,000	17,000	8,000	By closing stock	3500	2,000	1,500
To Freight	1,400	800	200				
To wages	800	700	200				
To Gross Profit	20,800	7,800	11,900				
	53,500	32,000	21,500		53,500	32,000	21,500
To Salaries	2,250	1,350	900	By Gross profit	20,800	7,800	11,900
To Power & Water	600	360	240	By Net loss	-	465	-
To Telephone	1,050	630	420				
To Bad Debts	375	225	150				
To Rent	3,000	1,800	1,200				
To Insurance	750	450	300				
To Printing	1,000	600	400				
To Advertisement	1,750	1,050	700				
To Depreciation (2,000 + 4,000)	3,000	1,800	1,200				
To Net profit	7,025	-	6,390				
	20,800	8,265	11,900		20,800	8,265	11,900

Balance sheet as at 31-03-2015

Liabilities	Amount (Rs.)	Assets	Amount (Rs.)
Creditors	15,000	Furniture's & fixtures	4,600
Bank O.D	12,000	Plant & machinery	20,000
Outstanding wages	200	Less: Depreciation	(2,000)
Capital	40,000	Motor vehicles	40,000
Add: Profit (7,025 + 6,390)	13,415	Less: Depreciation	(4,000)
Less: Loss	(465)	Debtors	12,200
	52,950	Cash in hand	850
Less: Drawings	(1,500)	Stock	7,000
	78,650		78,650

PROBLEM NO: 3

Calculation of Departmental Results (Actual Gross Profit):

Particulars	P (Rs.)	Q (Rs.)	R (Rs.)
Actual Sales	1,88,000	1,66,000	93,000
Add back: Discount (Refer W.N.)	4,000	2,000	2,000

Normal sale	1,92,000	1,68,000	95,000
Gross profit % on normal sales	25%	33.33%	40%
Normal gross profit	48,000	56,000	38,000
Less: Discount	(4,000)	(2,000)	(2,000)
Actual gross profit	44,000	54,000	36,000

Computation of value of stock as on 31st Dec. 2014

Dr. Departmental Trading A/c of Sona Ltd. for the year ended 31.12.2014 Cr.

Particulars	P (Rs.)	Q (Rs.)	R (Rs.)	Particulars	P (Rs.)	Q (Rs.)	R (Rs.)
To Opening Stock	30,000	45,000	15,000	By Sales	1,88,000	1,66,000	93,000
To Purchases	1,60,000	1,30,000	60,000	By Closing Stock (b/f)	46,000	63,000	18,000
To Gross Profit b/d	44,000	54,000	36,000				
	2,34,000	2,29,000	1,11,000		2,34,000	2,29,000	1,11,000

Working Note: Calculation of discount on sales

Departments	P (Rs.)	Q (Rs.)	R (Rs.)
Sales at Normal price	15,000	8,000	6,000
Less: Sales at Actual price	(11,000)	(6,000)	(4,000)
	4,000	2,000	2,000

PROBLEM NO:4

1. Calculation of Departmental Results (Actual Gross Profit):

Particulars	A (Rs.)	B (Rs.)	C (Rs.)
Actual Sales	1,72,500	1,59,400	74,600
Add back: Discount (Refer W.N.)	2,500	600	400
Normal sale	1,75,000	1,60,000	75,000
Gross profit % on normal sales	20%	25%	33.33%
Normal gross profit (Normal sale XGP%)	35,000	40,000	25,000
Less: Discount	(2,500)	(600)	(400)
Actual gross profit	32,500	39,400	24,600

2. Computation of value of stock as on 31st Dec. 2012:

Departments	A (Rs.)	B (Rs.)	C (Rs.)
Stock (on 1.1. 2012)	24,000	36,000	12,000
Add: Purchases	1,46,000	1,24,000	48,000
	1,70,000	1,60,000	60,000
Add: Actual gross profit	32,500	39,400	24,600
	2,02,500	1,99,400	84,600
Less: Actual Sales	(1,72,500)	(1,59,400)	(74,600)
Closing stock as on 31.12.2012 (bal.fig.)	30,000	40,000	10,000

Working Note:

Calculation of discount on sales:

Departments	A (Rs.)	B (Rs.)	C (Rs.)
Sales at normal price	10,000	3,000	1,000
Less: Sales at actual price	(7,500)	(2,400)	(600)
	2,500	600	400

PROBLEM NO: 5**Sales value of purchased units:**

Dept. A = 1,000 X 20 = 20,000

Dept. B = 2,000 X 22.5 = 45,000

Dept. C = 2,400 X 25	= <u>60,000</u>
5,400 units	= <u>1,25,000</u>
(-) cost of purchases	= <u>(1,00,000)</u> = cost of goods sold (Assumed)
G.P	= <u>25,000</u>
G.P	= $\frac{GP}{Sales} \times 100 = \frac{25,000}{1,25,000} \times 100 = 20\%$

Computation of cost per unit:

Dept.	SP per unit	GP per unit	Cost per unit
A	20	(20 x 20%) = 4	16
B	22.5	(22.5 x 20%) = 4.5	18
C	25	(25 x 20%) = 5	20

Computation of Closing Stock Units:

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

Computation of value of opening stock, purchase and closing stock:

Dept.	Opening stock	Purchases	Closing stock
A	120 units x Rs. 16 = Rs. 1,920	1,000 x 16 = 16,000	100 units x Rs. 16 = Rs. 1,600
B	80 units x Rs. 18 = Rs. 1,440	2,000 x 18 = 36,000	160 units x Rs. 18 = Rs. 2,880
C	152 units x Rs. 20 = Rs. 3,040	2,400 x 20 = 48,000	56 units x Rs. 20 = Rs. 1,120

Dr. Departmental Trading A/c Cr.

Particulars	A	B	C	Particulars	A	B	C
To Opening Stock	1,920	1,440	3,040	By sales (Actual)	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	4,080	8,640	12,480				
Total	22,000	46,080	63,520	Total	22,000	46,080	63,520

PROBLEM NO: 6

Statement showing the computation of department profit or loss:

	Particulars	A (Rs.)	B (Rs.)	C (Rs.)	D (Rs.)
a)	Final profit / Loss computed earlier	(38,000)	50,400	72,000	1,08,000
b)	Add: Department manager's commission @ 10% of Dept. Profit Subject to a minimum of Rs. 6,000 [W.N.1]	6,000	6,000	8,000	12,000
c)	Profit before Dept. manager's Commission (A+B)	(32,000)	56,400	80,000	1,20,000
d)	Less: Profit earned through transfer of goods at Loaded price remaining in stock at transfer department (W.N-2)	(2,200)	-	8,600	-
e)	Correct Departmental profit (before manager's commission (C-D))	(34,200)	56,400	71,400	1,20,000
f)	Less: Manager's commission @ 10% of profit subject to a minimum of Rs. 6,000	(6,000)	(6,000)	(7,140)	(12,000)
g)	Departmental Profit after manager's Commission (E-F)	(40,200)	50,400	64,260	1,08,000

WORKING NOTE:

1. Manager's commission:

	Dept. profit / Loss (Rs.)	Commission (Rs.)	(Rs.)
A	(38,000)	6,000	
B	50,400	6,000	i.e. 50,400 x 1/9 = Rs. 5,600 less than 6000
C	72,000	8,000	i.e. (72,000 x 1/9 = 8,000)
D	1,08,000	12,000	i.e. (1,08,000 x 1/9 = 12,000)

2. Unrealised profit on Stock transfer:

	Particulars	Amount (Rs.)
Dept. A	Rs. 22,000 to Dept. B @ 110% Profit there on 22,000 x 10/110	2,000
	Rs. 1,200 to Dept. D @ 120% Profit there on 1,200 x 20/120	200
		2,200
Dept. C	Rs. 48,000 to Dept. B @120% Profit there on 48,000 x 20/120	8,000
	Rs. 3,600 to Dept. D @ 120% Profit There on 3,600 x 20/120	600
		8,600

PROBLEM NO: 7

Dr. Departmental Trading Account of Mega Ltd. for the year ended 31st March, 2014 Cr.

Particulars	Debt. A	Debt. B	Particulars	Debt. A	Debt. B
To Opening Stock	70,000	54,000	By Sales	5,72,000	4,60,000
To Purchases	3,92,000	2,98,000	By Transfer:		
To Carriage Inward	6,000	9,000	Purchased goods	36,000	50,000
To Wages	54,000	36,000	Finished goods	1,30,000	1,18,000
To Transfers:			By closing stock		
Purchased goods	50,000	36,000	Purchased goods	24,000	30,000
Finished goods**	1,18,000	1,30,000	Finished goods	1,02,000	62,000
To Gross Profit c/d	1,74,000	1,57,000			
	8,64,000	7,20,000		8,64,000	7,20,000

* Finished goods from other department included in closing stock

Particulars	Dept. A	Dept. B
Stock of Finished Goods	1,02,000	62,000
Stock related to other department (30% of Finished Goods)	30,600	18,600

** Net transfer of Finished Goods by

Department A to B = (1,75,000 - 45,000) = 1,30,000

Department B to A = (1,50,000 - 32,000) = 1,18,000

Dr. General Profit and Loss A/c of Mega Ltd. for the year ended 31st March, 2014 Cr.

Particulars	Rs.	Particulars	Rs.
To Provision for unrealised profit included in closing stock:		By Gross Profit b/d:	
Department A (W.N.2)	8,311	Department A	1,74,000
Department B (W.N.2)	4,611	Department B	1,57,000
To Net Profit	3,18,078		
	3,31,000		3,31,000

Working Notes:

1. Calculation of ratio of gross profit margin on sales

Particulars	Dept. A	Dept. B
Sales	5,72,000	4,60,000
Add: Transfer of Finished Goods	1,75,000	1,50,000
	7,47,000	6,10,000
Less: Return of Finished Goods	(45,000)	(32,000)
	7,02,000	5,78,000
Gross Profit	1,74,000	1,57,000
Gross Profit margin =	$\frac{1,74,000}{7,02,000} \times 100 = 24.79\%$	$\frac{1,57,000}{5,78,000} \times 100 = 27.16\%$

2. Unrealised profit included in the closing stock:

Department A = 27.16% of Rs. 30,600 (30% of Stock of Finished Goods Rs.1,02,000) = 8,311.00

Department B = 24.79% of Rs.18,600 (30% of Stock of Finished Goods Rs.62,000) = 4,611.00

PROBLEM NO: 8

M/s D, B and R

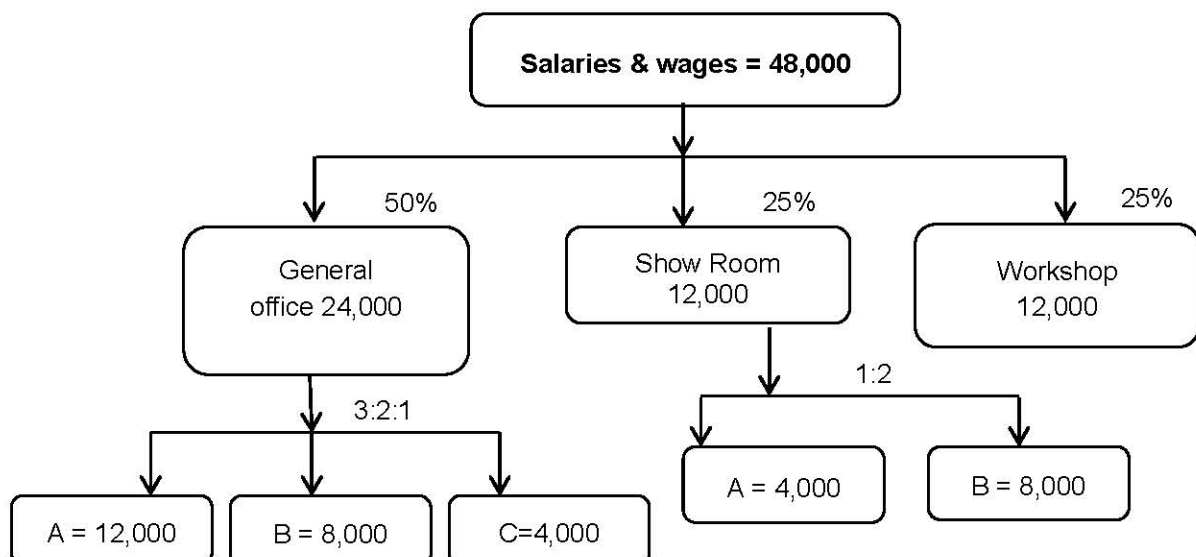
Dr. Departmental Trading and Profit & Loss Account for the six months ended 31-03-2013 Cr.

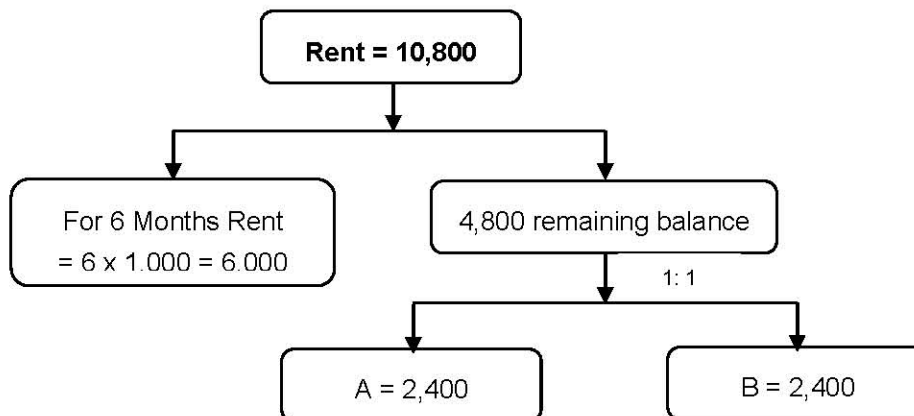
	A	B	C	Total		A	B	C	Total
To Opening Stock	37,890	24,000	20,000	81,890	By Sales	1,80,000	1,30,000	90,000	4,00,000
To Purchases	1,40,700	80,600	44,400	2,65,700	By Transfer	10,700	600	-	11,300
To Transfer	-	-	11,300	11,300	By Closing Stock	45,100	22,300	21,600	89,000
To Wages (WN-1)	-	-	12,000	12,000					
To Gross Profit c/d	57,210	48,300	23,900	1,29,410					
	2,35,800	1,52,900	1,11,600	5,00,300		2,35,800	1,52,900	1,11,600	5,00,300
To Salaries & wages:					By Gross Profit b/d	57,210	48,300	23,900	1,29,410
General Office (WN-1)	12,000	8,000	4,000	24,000	By Discount Receive	400	250	150	800
Show Room (WN-1)	4,000	8,000	-	12,000					
To Advertising	1,080	780	540	2,400					
To Rent (WN-2)	2,400	2,400	6,000	10,800					
To Discount Allowed	540	390	270	1,200					
To Sundry Expenses	5,400	3,900	2,700	12,000					
To Depreciation	250	250	250	750					
To Net Profit c/d	31,940	24,830	10,290	67,060					
	57,610	48,550	24,050	1,30,210		57,610	48,550	24,050	1,30,210

Note: Gross profit of Department A is 30% of Sales price (including transfer to Department C). There is some unrealised profit only on inter departmental stock. 30% of Rs. 5,700 is as stock reserve. This will be debited to Profit and Loss Appropriation Account.

Dr. Profit and Loss Appropriation Account Cr.

Particulars	Rs.	Particulars	Rs.
To Stock Reserve (See Note) (5,700 x 30%)	1,710	By Net Profit transferred from P&L A/c	67,060
To D: 75% of Profit of Dept. A 23,955 50% of Combined profits <u>7,527</u>	31,482		
To B: 75% of Profit of Dept. B 18,623 25% of Combined profits <u>3,763</u>	22,386		
To R: 75% of Profit of Dept. C 7,718 25% of Combined profits <u>3,764</u>	11,482		
	67,060		67,060

Working Note - 1 Calculation of salaries & wages:

Working Notes - 2 Calculation of rent:**PROBLEM NO: 9**

- i) Dr. Department Trading Account For the year ending on 31.03.20X2 Cr.
In the books of Head Office

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Opening Stock	65,000	By Sales	3,00,000
To Purchases	2,00,000	By Shortage	1,000
To Gross Profit c/d (b.f.)	58,880	By Closing Stock	22,880
	3,23,880		3,23,880

- ii) Memorandum stock account (for Department A) (at selling price)

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Balance b/d (Rs. 65,000 + 25% of Rs. 65,000)	81,250	By Profit & Loss A/c (Cost of Shortage)	1,000
To Purchases (Rs. 2,00,000 + 25% of Rs. 2,00,000)	2,50,000	By Memorandum Departmental Markup A/c (Load on Shortage) (Rs. 1,000 x 25%)	250
		By Memorandum Departmental Mark-up A/c (Mark-down on Current Purchases)	1,200
		By Debtors A/c (Sales)	3,00,000
		By Memorandum Departmental Mark-up A/c (Mark Down on Opening Stock)	600
		By Balance c/d (b.f.)	28,200
	3,31,250		3,31,250

- iii) Memorandum Departmental Mark-up Account

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Memorandum Departmental Stock A/c (Rs. 1,000 x 25/100)	250	By Balance b/d (Rs. 81,250 x 25/125)	16,250
To Memorandum Departmental Stock A/c	1,200	By Memorandum Departmental Stock A/c (Rs. 2,50,000 x 25/125)	50,000
To Memorandum Departmental Stock A/c	600		
To Gross Profit transferred to Profit & Loss A/c	58,880		
To Balance c/d [(Rs. 28,200 + 400*) x 25/125 - Rs. 400]	5,320		
	66,250		66,250

*[Rs. 1,200 x 5,000/15,000] = Rs. 400

Working Notes:

- i) Calculation of Cost of Sales

	Particulars	Amount (Rs.)
A.	Sales as per Books	3,00,000
B.	Add: Mark-down in opening stock (given)	600
C.	Add: Mark-down in sales out of current Purchases (Rs. 1,200 x 10,000 /15,000)	800
D.	Value of sales if there was no mark-down (A+B+C)	3,01,400
E.	Less: Gross Profit (25/125 of Rs. 3,01,400)	(60,280)
F.	Cost of sales (D-E)	2,41,120

ii) Calculation of Closing Stock

	Particulars	Amount (Rs.)
A.	Opening Stock	65,000
B.	Add: Purchases	2,00,000
C.	Less: Cost of Sales	(2,41,120)
D.	Less: Shortage	(1,000)
E.	Closing Stock (A+B-C-D)	22,880

Note: It has been assumed that markup (given in question) is determined as a percentage of cost.

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THE END