

(i)

1. Direct Material Cost

$A = 60000/10000 = \text{Rs. } 6$

$B = 50000/10000 = \text{Rs. } 5$

2. Direct Labour cost

Take data of 1st and 3rd quarter

Variable labour cost = $50000 / 5000 = \text{Rs. } 10$ per unit. (Don't take data of 2nd quarter as OT will also be there)

Fixed Labour Cost = **Rs. 80,000**

Variable labour cost in quarter IV = $10 \times 80\% \times 112.5\% = \text{Rs. } 9$

New Fixed labour cost in quarter IV = $80000 \times 112.5\% = \text{Rs. } 90,000$

3. Manufacturing Overheads

Take data of 1st and 2nd quarter

Variable cost = $30000 / 10000 = \text{Rs. } 3$ per unit.

Fixed Cost = **Rs. 60,000**. New Fixed cost in quarter IV = $60000 \times 120 = \text{Rs. } 72,000$

4. S & D Overheads

Take data of 1st and 2nd quarter

Variable cost = $16000 / 80000 = \text{Rs. } 2$ per unit.

Fixed Cost = **Rs. 20,000**

New Fixed cost in quarter IV = $20000 \times 120\% = \text{Rs. } 24,000$

Summary of the Cost for the quarter IV

	Fixed	Variable
Direct Materials – A	-----	6
Direct Materials – B	-----	5
Production Labour	90,000	9 (Normal) & 13.5
Manufacturing Overhead Ex. Depreciation	72,000	3
Depreciation of Production Machinery	20,000	-----
Administration Expenses	25,000	-----
Selling & Distribution Expenses	24,000	2

(ii) Flexible Budget Of Production Costs For The Quarter IV

Number of units	15,000	18,000	21,000
Direct Materials A - @ Rs. 6	90,000	108,000	126,000
Direct Materials B - @ Rs. 5	75,000	90,000	105,000
Direct Labour – Fixed	90,000	90,000	90,000
Direct Labour - Variable @ Rs. 9	135,000	162,000	171,000
Direct Labour - Variable @ Rs. 13.5			27,000
Manufacturing overheads - Fixed	72,000	72,000	72,000
Manufacturing overheads - variable @ Rs. 3	45,000	54,000	63,000
Depreciation of Production Machinery	20,000	20,000	20,000
TOTAL PRODUCTION COST	527,000	596,000	674,000
S & D overheads – Fixed	24,000	24,000	24,000
S & D overheads - variable @ Rs. 2	30,000	36,000	42,000
Administration Expenses	25,000	25,000	25,000
TOTAL COST	606,000	681,000	765,000

Calculation of Selling Price			
Direct Materials	P	3 * 6	18
	Q	1.5 * 4	6 24
Direct Labour	Machine Shop	7 * 4	28
	Assembly Shop	2.5 * x 3.2	8 36
Overheads			12
Total Cost			72
(+) Profit			18
SP			90

Production Budget	
Sales	12,600,000
÷ SP	90
Qty Sold of FG	140,000
(+) Closing Stock OF FG	25,000
(-) Opening Stock of FG	(20,000)
Qty Produced of FG	145,000

(a) Purchase Budget	P	Q
Qty consumed of RM	435,000	217,500
(+) Closing Stock of RM	30,000	66,000
(-) opening Stock of RM	(54,000)	(33,000)
Qty Purchased of RM	411,000	250,500
x CPU	6	4
Purchase Cost	2,466,000	1,002,000

(b)	Machine Shop	Assembly Shop
Hours required for production	10,15,000	3,62,500
÷ hours per worker per year	1,840	1840
Number of workers required	552	198
Number of workers available	600	180
Surplus workers	48	
Short workers		18

Comments: Comments: Number of workers required 552 & 198. There are surplus 48 workers in machine shop and deficit of 18 workers in assembly department. If it is possible then shift 18 workers from machine shop to assembly and remove the rest in machine shop. If it is not possible to shift the workers because of wage rate difference, then remove 48 workers from machine shop and recruit 18 more workers in assembly. Alternately, if workers do not agree to shift, company can resort to overtime.

Sales Budget	A	B
Quantity Sold of Finished Goods	5,000	8,000
x Selling Price	400	600
Sales	2,000,000	4,800,000

Production Budget	A	B
Quantity Sold of Finished Goods	5,000	8,000
(+) Closing Stock of Finished Goods	2,000	5,000
(-) Opening Stock of Finished Goods	3,000	4,000
Quantity Produced of Finished Goods	4,000	9,000

Production Budget	Production	C	D
		RM / unit	RM / unit
		Total	Total
A	4,000	3	2
B	9,000	2	3
RM Required for Production		30,000	35,000
(+) Closing Stock		12,000	3,000
(-) Opening Stock		10,000	4,000
Quantity Produced		32,000	34,000

Purchase budget of C	
Max Production	30,000
(-) Rejection	3,000
Net Production	27,000
(-) Required	32,000
To be Purchased	5,000

Production /Purchase Budget	Production	E	F
		RM / unit	RM / unit
		Total	Total
C	30,000	1	2
D	34,000	2	1
RM Required for Production		98,000	94,000
(+) Closing Stock		4,000	8,000
(-) Opening Stock		2,000	5,000
Quantity Produced / Purchased		100,000	97,000
x Purchase cost per unit			4
Purchase Cost			388,000

Purchase Budget	Production	G
		RM / unit
		Total
E	100,000	2
RM Required for Production		200,000
(+) Closing Stock		12,000
(-) Opening Stock		2,000
Qty to be purchased		210,000
x Purchase cost per unit		6
Purchase Cost		1,260,000

Labour budget					
Item	Production Qty	Skilled Labour		Unskilled Labour	
		Hours	Cost	Hours	Cost
A	4,000	8,000	40,000	20,000	40,000
B	9,000	36,000	180,000	18,000	36,000
C	30,000	210,000	1,050,000	30,000	60,000
D	34,000	102,000	510,000	136,000	272,000
E	100,000	200,000	1,000,000	100,000	200,000
			2,780,000		608,000

PRODUCTION BUDGET	Standard	Deluxe	Aristocrat	Royal
Quantity Sold of Finished Goods	200	600	500	300
(+) Closing Stock of Finished Goods	25	25	25	25
(-) Opening Stock of Finished Goods	46	73	64	69
Quantity Produced of Finished Goods	179	552	461	256

PURCHASE BUDGET OF CABINETS	Production	A	B	C	D	Total
Standard	179	179				
Deluxe	552		552			
Aristocrat	461			461		
Royal	256				256	
Total Requirement for production		179	552	461	256	
(+) Closing Stock		15	15	15	15	
(-) Opening Stock		30	40	20	25	
Qty purchased of Raw Material		164	527	456	246	
x Purchase cost		200	300	500	700	
Purchase Cost		32,800	158,100	228,000	172,200	591,100

Purchase Budget of Transformers	Production	X	Y	Total
Standard	179	179		
Deluxe	552	552		
Aristocrat	461		461	
Royal	256		256	
Total Requirement for production		731	717	
(+) Closing Stock		20	20	
(-) Opening Stock		31	17	
Qty purchased of Raw Material		720	720	
x Purchase cost		200	300	
Purchase Cost		144,000	216,000	360,000

Purchase Budget of Speakers	Production	5 inch	6 inch	12 inch	Total
Standard	179	179			
Deluxe	552	552			
Aristocrat	461		461		
Royal	256			256	
Total Requirement for production		731	461	256	
(+) Closing Stock		30	30	30	
(-) Opening Stock		27	47	18	
Qty purchased of Raw Material		734	444	268	
x Purchase cost		300	400	600	
Purchase Cost		220,200	177,600	160,800	558,600

PURCHASE BUDGET OF PICTURE TUBE	Production	OWN	BEL	TELETUBE	Total
Standard	179	179			
Deluxe	552		552		
Aristocrat	461		461		
Royal	256			256	
Total Requirement for production		179	1,013	256	
(+) Closing Stock		30	40	20	
(-) Opening Stock		20	17	34	
Qty purchased of Raw Material		189	1,036	242	
x Purchase cost		-	1,200	1,600	
Purchase Cost		-	1,243,200	387,200	1,630,400

TOTAL PURCHASE COST = 3,140,100
