

## COST SHEET - Q5

Let X be the cost, Y be the profit and Rs. 1,600 selling price per unit of radio manufactured by a company. Hence

$$X + Y = 1,600 \quad \text{-----} \quad (i)$$

Statement of present and future Cost of a radio

Particulars	Present cost	Increase in cost	Anticipated future cost
Direct material	0.3 X	0.09 X	0.39 X
Direct labour	0.4 X	0.04 X	0.44 X
Overheads	0.3 X	--	0.30 X
Total	X	0.13 X	1.13 X

An increase in material price and wage rates resulted into a decrease in current profit by 40 percent at present selling price; therefore we have:

$$1.13 X + 0.6 Y = 1,600 \quad \text{-----} \quad (ii)$$

On solving (i) and (ii) we get:

$$X = \text{Rs. } 1,207.55 \quad \& \quad Y = \text{Rs. } 392.45$$

Current profit    Rs. 392.45 or 32.5% of cost

Future profit    Rs. 235.47'

Statement of revised selling price to maintain the present rate of profit

	Rs.
Direct material cost (0.39 x Rs. 1,207.55)	470.94
Direct labour cost (0.44 x Rs. 1,207.55)	531.32
Overheads (0.30 x Rs. 1,207.55)	362.27
Total cost	1,364.53
Profit (32.5% of total cost)	443.47
Revised selling price	1,808.00