Marginal Costing

Time Allowed : 35 Minutes | **TEST – 10 (Solution)** | **Total: 20 Marks**

Answer to Question no.1:

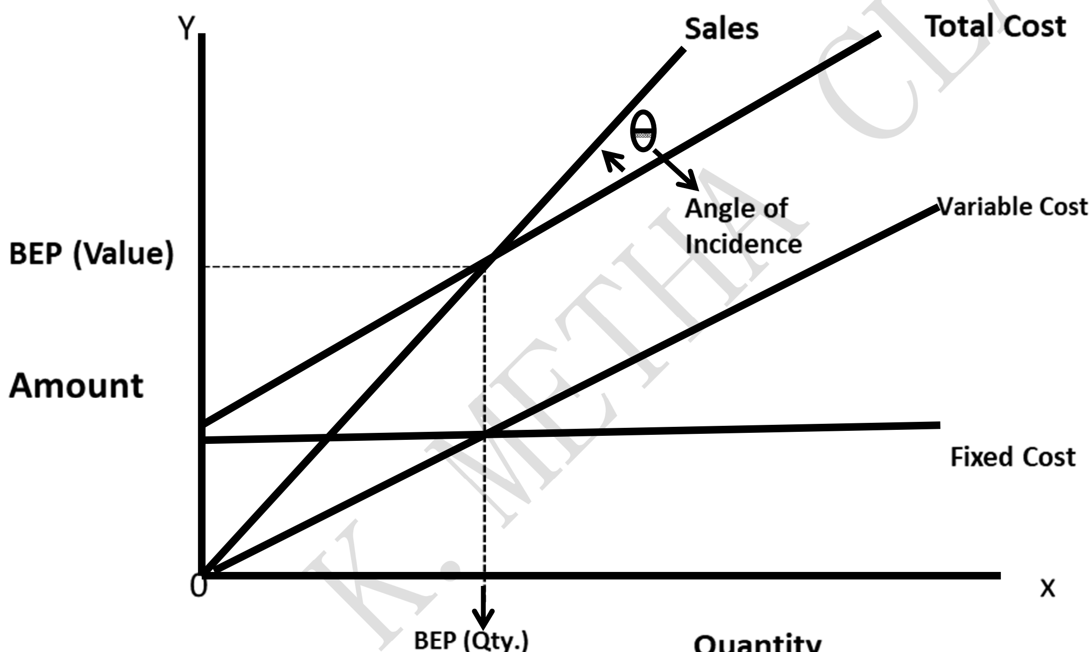
Meaning: - Break-even Point refers to the situation where the amount of contribution is sufficient only for absorbing the amount of fixed cost. So, ultimately the organization achieves the situation of "No profit, no loss".

Formula:-

$$\text{BEP (Quantity)} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}}$$

$$\text{BEP (Value)} = \frac{\text{Fixed Cost}}{\text{P/v Ratio}}$$

Diagram:-



Answer to Question no.2:

Existing Situation:-

Sales = ₹ 10,00,000
P/v Ratio = 37%
Variable Cost= 64% of 10,00,000 = ₹ 6,30,000.
MS Ratio = 25%
Sales above break-even (Margin of Safety) = 25% of sales = 2,50,000
Sales uptil break-even = 75% of sales = ₹ 7,50,000

New (Revised) Situation:-

P/v Ratio = 30%
Variable Cost = 70% of Sales.
However, total Variable Cost of ₹ 6,30,000 should remain same because there is no change in quantity which is sold.

So, revised amount of sales = $\frac{6,30,000}{70\%}$ = ₹ 9,00,000

MS Ratio = 40% of Sales.

It means: - (i) Sales in exess of break-even is 40% of sales, i.e., ₹ 3,60,000 and (ii) Sales uptil break-even = 60% of sales

= 60% of 9,00,000 = ₹ 5,40,000

Also, BEP = $\frac{\text{Fixed Cost}}{\text{P/v Ratio}}$

Fixed Cost = BEPX P/v Ratio = 5,40,000 x 30% = ₹ 1,62,000

Answer to Question no.3:

Variable Cost per unit		Total Fixed Cost	
Direct Materials	₹6	Direct Labour (₹ 1.50 p.u. x 60,000 units)	₹ 90,000
Direct Labour (25%)	₹ 0.50	Manufacturing Overheads (₹ 3 p.u. x 60,000 units)	₹ 1,80,000
Manufacturing overheads (25%)	₹ 1	Marketing	₹ 1,20,000
Marketing	₹ 5		
	₹ 12.50		**₹ 3,90,000**

(i) <u>Computation of Actual profit during April:-</u>

Sales Revenue (40,000 units @ 22.50)	9,00,000
(-) Variable Cost (40,000 units @ 12.50)	(5,00,000)
Total contribution	4,00,000
(-) Total Fixed Cost	(3,90,000)
Profit	10,000

(ii) <u>Computation of budgeted profit for the month of May:-</u>

Particulars	**Existing customers**	**New customers**	**Total**
Sales	40,000 x 22.5 = 9,00,000	10,000 x 11 = 1,10,000	10,10,000
(-) variable Cost	40,000 x 12.5 = 5,00,000	10,000 x 7.5 = 75,000	(5,75,000)
Contribution	4,00,000	35,000	4,35,000
		(-) Total Fixed Cost	(3,90,000)
		Profit	45,000

(iii) The offer from new customers may be accepted by the management as it will lead to the situation of additional profit to the extent of ₹ 35,000.

<u>Note:-</u> In relation to new customers, there is no marketing cost. Hence, variable cost to taken as ₹ 7.50 (₹ 12.5 = ₹ 5)