

Solution for Assignment 6

1. The cost (of providing basic operating capacity) that does not change within a given time period even if volume changes is categorized as
 - a. Sunk cost
 - b. Variable cost
 - c. Fixed cost
 - d. Marginal cost
2. The cost which varies with level of volume of output is
 - a. Sunk cost
 - b. Variable cost
 - c. Fixed cost
 - d. Marginal cost
3. Cost which is defined as benefit obtained by following other courses of action is
 - a. Sunk cost
 - b. Opportunity cost
 - c. Marginal cost
 - d. Differential cost
4. Total input cost divided by level of output is
 - a. Average unit cost
 - b. Fixed cost
 - c. Variable cost per unit
 - d. Differential cost
5. Keeping fixed cost constant, with increase in marginal contribution, breakeven quantity
 - a. Increases
 - b. Decreases
 - c. Remains constant
 - d. Can't be said
6. Keeping fixed cost and income per unit of the product sold constant, with increase in variable cost per unit, breakeven quantity
 - a. Increases
 - b. Decreases
 - c. Remains constant
 - d. Can't be said
7. The value of marginal contribution is equal to
 - a. Fixed cost per unit – variable cost per unit
 - b. Fixed cost – variable cost
 - c. Income per unit – variable cost per unit
 - d. Income per unit – fixed cost per unit
8. For a company producing an item X, fixed cost is Rs 20 Lakhs, variable cost per unit is Rs 100 and selling price per unit is Rs 300. The breakeven sales quantity is
 - a. 20,000
 - b. 5,000
 - c. 6,667
 - d. 10,000

Solution: Given, F = 20 Lakhs, I = 300, V = 100

$$\begin{aligned}\text{BEQ} &= F / (I - V) = 2000000 / (300 - 100) \\ &= 10000 \text{ (Ans)}\end{aligned}$$

9. A plant has a capacity to produce 4100 refrigerators per month. The fixed cost is Rs. 50,40,000 per month. The variable cost is Rs. 1,500 per refrigerator, and the sales price is Rs. 4,020 per refrigerator. The breakeven point (in number of refrigerators per month) will be
- a. 1,000
 - b. 2,000
 - c. 3,000
 - d. 4,000

Solution: Given, $F = 5040000$, $I = 4020$, $V = 1500$

$$\begin{aligned}\text{BEQ} &= F / (I - V) = 5040000 / (4020 - 1500) \\ &= 2000 \text{ (Ans)}\end{aligned}$$

10. A certain firm has the capacity to produce 8,40,000 units of product per year. At present it is operating at 60% of its capacity. The firm's annual income is Rs. 50,40,000. Annual fixed cost are Rs. 21,20,000 and the variable cost is Rs. 3.92 per unit of product. The annual profit / loss would be
- (a) Loss of Rs. 9,44,320
 - (b) Profit of Rs. 9,44,320
 - (c) Profit of Rs. 7,44,320
 - (d) Loss of Rs. 7,44,320

Solution: Given, Annual Income = 5040000, Annual Fixed Cost (F) = 2120000,

Variable Cost (V) = 3.92 per unit

$$60\% \text{ Capacity} \Rightarrow \text{Production per year (n)} = 0.6 \times 840000 = 504000$$

$$\text{Total cost} = F + n V = 2120000 + 504000 \times 3.92 = 4095680$$

$$\text{Profit} = \text{Annual income} - \text{Total Cost} = 5040000 - 4095680 = 944320 \text{ (Ans)}$$