MARGINAL COSTING FLOWCHART BY CA RAKESH AGRAWAL

BASIC FORMULAE

Sales − Variable Cost = Contribution

Sales − Contribution = Variable Cost

Sales = Variable Cost + Contribution

Contribution − Fixed Cost = Profit/(Loss)

Contribution = Profit + Fixed Cost

Contribution = Fixed Cost − Loss

Contribution − Profit = Fixed Cost

Contribution + Loss = Fixed Cost

Variable Cost + Fixed Cost = Total Cost

Fixed Cost = Total Cost − Variable Cost

Variable Cost = Total Cost - Fixed Cost

Profit Volume Ratio (PVR)

$$= \frac{\text{Contribution}}{\text{Sales}} \times 100$$

PVR x Sales = Contribution

$$\text{Sales} = \frac{\text{Contribution}}{\text{PVR}}$$

Level of activity to earn desired profit

$$= \frac{(\text{Desired profit} + \text{Fixed cost})}{\text{Contb.p.u. or PVR or Cont. at 1\% cap.}}$$

SHORT CUT FORMULAE

$$\text{Variable cost p.u.} = \frac{\text{Change in cost}}{\text{Change in output}}$$

$$\text{Contribution per unit} = \frac{\text{Change in profit}}{\text{Change in output}}$$

$$\text{Variable cost Ratio} = \frac{\text{Change in cost}}{\text{Change in sales}} \times 100$$

$$\text{P.V. Ratio} = \frac{\text{Change in Profit}}{\text{Change in sales}} \times 100$$

ACTUAL SALES → BEP Sales

ACTUAL SALES → MOS Sales

$$\text{MOS} = \frac{\text{MOS sales}}{\text{Total sales}} \times 100$$

Profit = MOS sale x P/V Ratio

$$\frac{\text{Profit}}{\text{PVR}} = \text{MOS sales}$$

$$\frac{\text{Profit}}{\text{MOS sales}} = \text{PV Ratio}$$

BREAK EVEN POINT

1. NORMAL BEP : It is the sales activity at which there is no profit no loss. It can be calculated as follows

$$\text{BEP (units)} = \frac{\text{Total Fixed Cost}}{\text{Contribution Per Unit}}$$

$$\text{BEP (Rs)} = \frac{\text{Total Fixed Cost}}{\text{P/V Ratio}}$$

BEP (% capacity) =

$$\frac{\text{Total Fixed Cost}}{\text{Contribution at 1\% capacity}}$$

2. CASH BEP : It is the sales activity at which there is no cash loss. It means contribution earned is exactly equal to cash fixed cost

$$\text{Cash BEP} = \frac{\text{Cash Fixed Cost}}{\text{Contb. p.u. or PVR}}$$

3. COMPOSITE BEP : It is calculated for multiple products together. It is the composite (i.e. combined) sales at which there is no profit no loss. It can be calculated as

$$\text{Composite BEP} = \frac{\text{Overall fixed cost}}{\text{Overall PVR}}$$

$$\text{Overall PVR} = \frac{\text{Overall contribution}}{\text{Overall sales}} \times 100$$

4. COST BEP : It is the point at which total cost (i.e. V.C. + F.C.) under the two alternatives is exactly the same. The alternative with lower fixed cost is cheaper below Cost BEP and alternative with lower variable cost is cheaper above Cost BEP

$$\text{Cost BEP} = \frac{\text{Diff. in fixed cost}}{\text{Diff. in v.c.p.u.}}$$

MARGINAL COSTING V/S ABSORPTION COSTING

1. In marginal costing we treat fixed cost as period cost whereas under absorption costing we treat fixed cost as product cost.
2. In marginal costing closing stock is valued at variable cost of production. However under absorption costing closing stock is valued at total cost of production.
3. In marginal costing value of stock is lower than absorption costing.
4. Marginal costing rewards sales and absorption costing rewards production.
5. Marginal costing is used for decision making and absorption costing is used for accounting.

Best of Luck

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