



# A PRESENTATION ON “COST ACCOUNTING”



## TOPIC : MARGINAL COSTING



(WITH PRACTICAL PROBLEM)

# Calculation of P/V Ratio, BEP, Profit



- From the following information calculate :
  1. P/V Ratio
  2. Fixed Cost
  3. Break Even Sales
  4. Profit at sales of Rs. 24.00.000

<b>PARTICULARS</b>	<b>31-03-2017 (RS)</b>	<b>31-03-2018 (RS)</b>
Sales	18,00,000	21,00,000
Profit	1,20,000	1,80,000

## *Solution :-*

### **1. Calculation of P/V Ratio :**

- P/V Ratio
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$$= \frac{\text{Change in Profit}}{\text{Change in sales}} \times 100$$
$$= \frac{1,80,000 - 1,20,000}{21,00,000 - 18,00,000} \times 100$$
$$= \frac{60,000}{3,00,000} \times 100 = 20\%$$

**P/V Ratio = 20%**

## 2. Calculation of Fixed Cost :

(Here we have got PV Ratio. So, Which formulae useful to get F.C. By PVR ?)



$$\begin{aligned} \bullet \text{ P/V Ratio} &= \frac{\text{Contribution}}{\text{Sales}} \times 100 \\ \bullet & \\ \bullet \quad \quad \quad 20\% &= \frac{\text{Contribution}}{18,00,000} \end{aligned}$$

*(by using % for both sides Value of 100 decline)*

$$\bullet \quad \quad \quad 18,00,000 \times 20\% = C$$

$$\bullet \quad \quad \quad 3,60,000 = C$$

Now we are finding Value of **FC** by using formulae of **contribution**

So,

$$\bullet \quad \quad \quad C = \text{Fixed cost} + \text{Profit}$$

$$\bullet \quad \quad \quad 3,60,000 = \text{Fixed Cost} + 1,20,000 \text{ (Given)}$$

$$\bullet \text{ Hence, Fixed cost} = 3,60,000 - 1,20,000 = \mathbf{2,40,000}$$

**Fixed cost = 2,40,000**

*(Note : Fixed cost remain Fixed for both year So, we don't want to calculate twice)*

### 3. Calculation of BEP Sales :



- BEP Sales =  $\frac{\text{Fixed Cost}}{\text{PVR}}$

- =  $\frac{2,40,000}{20\%}$

- = 12,00,000

- ***BEP Sales = 12,00,000***

## 4. Calculation of Profit at sales Rs. 24,00,000

(How much Profit we can acquire by turnover of Rs. 24,00,000)



• By using Sales Formulae

$$\text{Sales} = \frac{\text{Contribution}}{\text{P/V Ratio}}$$

$$\text{Sales} = \frac{\text{Fixed Cost} + \text{Profit}}{\text{P/V Ratio}}$$

$$24,00,000 = \frac{2,40,000 + \text{Profit}}{20\%}$$

$$24,00,000 \times 20\% = 2,40,000 - \text{Profit}$$

$$4,80,000 = 2,40,000 - \text{Profit}$$

Hence,  $\text{Profit} = 4,80,000 - 2,40,000 = 2,40,000$

**Profit = 2,40,000**