

**1 Marginal Cost Statement**

Particulars	Rs.
Sales (S)/ Selling Price	xxx
(-) Variable Cost (V)	xxx
= Contribution ( c )	xxx
(-) Fixed Cost (F)	xxx
Profit/(Loss) (P)	xxx

**2 Marginal Cost Equation**  $S - V = C = F +/- P$

**3 P/V ratio**

This ratio shows proportion of sales required to cover fixed cost and profit.

$$P/V \text{ Ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100$$

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

Break even point= Fixed cost/Contribution per unit

$$\text{Composite BEP} = \frac{\text{Common FC}}{\text{Composite Contribution p.u}}$$

Cash break even point= Cash Fixed cost/Contribution per unit

**5 Concept of Desired Sales**

Sales that a company is required to make to achieve a profit target in a period. It is always higher than breakeven sales.

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

**4 Margin of Safety**

It is difference between expected level of sales and break-even sales. The larger is margin of safety, higher is the profit & vice-versa

$$\text{Margin of Safety} = \frac{\text{Profit}}{P / V \text{ Ratio}}$$

**6 Sales**

(-) Variable Cost (V)

= Contribution ( c )

$$PV \text{ Ratio} = \frac{\text{Contribution}}{\text{Sales}}$$

Fixed Cost

Net Profit

$$BEP = FC / \text{Contribution p.u. or PV Ratio}$$

$$MOS = \text{Profit} / \text{Contribution p.u. or PV Ratio}$$

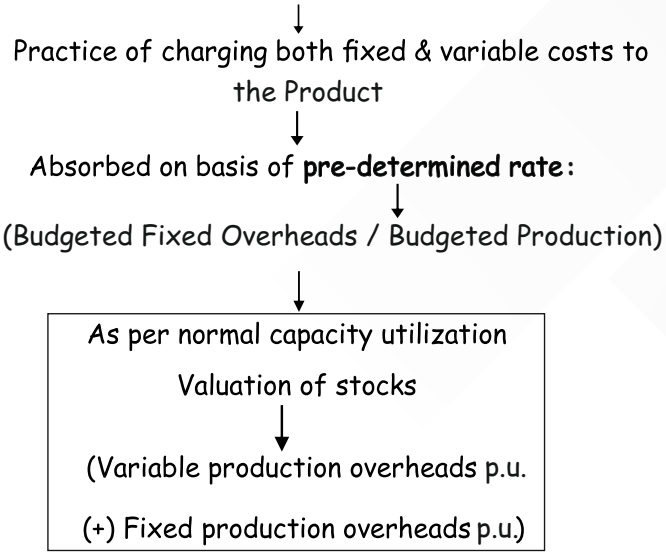
**7 Distinction Between Marginal And Absorption Costing**

The distinctions in these two techniques are illustrated by the following diagrams:

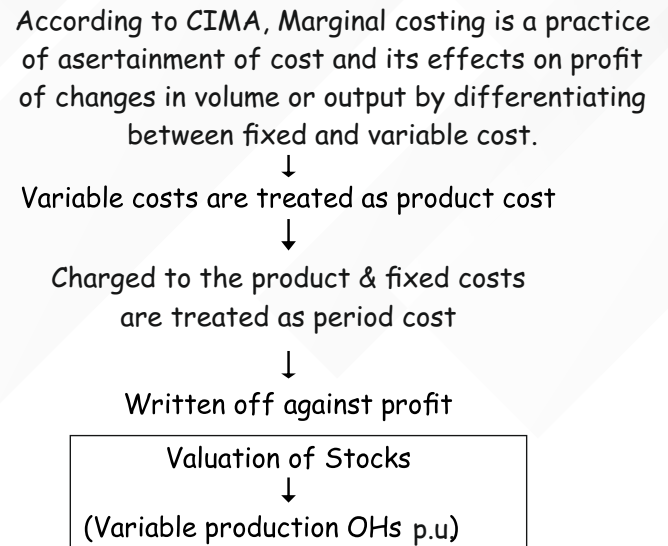
**Absorption Costing VS Marginal Costing**

There are two techniques of working out costs.

As per CIMA, Absorption Costing



As per CIMA, Marginal Costing



**Note:** In a nutshell, in Absorption, FC = Product Cost and in Marginal, FC = Period Cost

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**Income Statement (Absorption Costing)**

Sales	XXXXX
Production Costs:	
Direct material consumed	XXXXX
Direct labour cost	XXXXX
Variable manufacturing overhead	XXXXX
Fixed manufacturing overhead	XXXXX
<b>Cost of Production</b>	XXXXX
Add: Opening stock of finished goods (Value at cost of previous period's production)	XXXXX
Less: Closing stock of finished goods (Value at production cost of current period)	XXXXX
<b>Cost of Goods Sold</b>	XXXXX
Add: (or less) Under (or over) absorption of fixed Manufacturing overhead	XXXXX
Add: Administration costs	XXXXX
Selling and distribution costs	XXXXX
<b>Total Cost</b>	XXXXX
<b>Profit (Sales - Total cost)</b>	XXXXX

**P/ L (Absorption Costing)**

Particular	Particular
To Opening Stk. (Valued at Variable Production OH	By Sales By Closing Stk. (Valued at Variable Production OH.
To Direct Material	
To Direct Labour	(DM + DL +
To Variable OH	V OH. + F OH)
To Admin OH	By Order
To Sales & Dist.	Absorption
To Under Absorption	
To Net Profit	

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**Income Statement (Marginal costing)**

	(₹)
Sales	XXXXX
<u>Variable manufacturing costs:</u>	
- Direct material consumed	XXXXX
- Direct labour	XXXXX
- Variable manufacturing overhead	XXXXX
<b>Cost of Goods Produced</b>	XXXXX
Add: Opening stock of finished goods (Value at cost of previous period)	XXXXX
Less: Closing stock of finished goods (Value at current variablecost)	XXXXX
<b>Cost of Goods Sold</b>	XXXXX
Add: Variable administration, selling and dist. overhead	XXXXX
<b>Total Variable Cost</b>	XXXXX
Add: Selling and distribution costs	
<b>Contribution (Sales - Total variable costs)</b>	XXXXX
Less: Fixed costs (Production, admin., selling and dist.)	XXXXX
<b>Net Profit</b>	XXXXX

**P/ L (Absorption Costing)**

Particular	Particular
To Opening Stk. (Valued at Variable Production OH	By Sales By Closing Stk. (Valued at Variable Production OH.
To Direct Material	
To Direct Labour	(DM + DL +
To Variable OH	V OH. + F OH)
To Admin OH	
To Sales & Dist.	
To Net Profit	

**Reconciliation of Absorption  
& Marginal**

Net Profit as per Absorption  
 ( - ) If Opening stock higher in Marginal  
 ( + ) if Opening stock lower in Marginal  
 ( + ) If Closing stock higher in Marginal  
 ( - ) If Closing Stock lower in Marginal

**Net Profit as per Marginal**

**WHAT IS KEY FACTOR/BUDGET FACTOR/LIMITING FACTOR?**

<b>Meaning</b>	Key Factor is a factor which limits the activities of an undertaking. The extent of its influence must first be assessed while preparing functional budgets and taking decisions about the profitability of a product.
<b>Examples</b>	Some of the examples of key factor are: a) Shortage of raw material    b) Shortage of labour c) Plant Capacity available    d) Sales Capacity available e) Cash available

$$\frac{\text{Contribution p.u.}}{\text{Limiting Factor p.u.}}$$

(Machine hours, Labour hours, etc.)

**COST INDIFFERENCE POINT**

Cost Indifference Point means the point at which a Co. is indifferent for selecting various alternatives.

It refers to that level of activity at which the total cost (i.e. Fixed cost + Variable cost) of two alternatives is the same.

At Cost Indifference Point,  $TC_A = TC_B$

$$VC_A + FC_A = VC_B + FC_B$$

where, FC = Fixed Cost

VC = Variable Cost

TC = Total Cost

$$\text{Cost indifference Point} = \frac{\text{Difference in Fixed Cost}}{\text{Difference in Variable Cost p.u}}$$

Interpretation:

At Activity level below the Indifference Point	Alternative with lower fixed cost to be Used
At Activity level above the Indifference point	Alternative with lower variable cost to be Used
At Activity level equal to the Indifference point	Any alternative to be used

**FORMULA:**

$$1) \text{ Contribution} = \text{Sales} - \text{Variable Cost}$$

$$\text{Contribution} = \text{Fixed Cost} + \text{Profit}$$

$$2) \text{ Total Sales} = \text{SP per unit} \times \text{Sales Quantity}$$

$$3) \text{ Total Variance Cost} = \text{Variable Cost per unit} \times \text{Sales Quantity}$$

$$4) \text{ Sales Quantity} = \frac{\text{Total Contribution}}{\text{Contribution per unit}}$$

$$5) \text{ Total Cost} = \text{Fixed Cost} + \text{Variable cost}$$

$$6) \text{ P.V. Ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100$$

$$7) \text{ BEP in Quantity} = \frac{\text{Total Fixed Costs}}{\text{Contribution per unit}}$$

$$8) \text{ BEP in Value} = \text{BEP in Quantity} \times \text{SP per unit}$$

$$9) \text{ BEP in Value} = \frac{\text{Total Fixed Costs}}{\text{P.V. Ratio}}$$

$$10) \text{ MOS} = \text{Total Sales} - \text{BEP Sales}$$

$$11) \text{ MOS in Value} = \frac{\text{Profit}}{\text{P.V. Ratio}}$$

$$12) \text{ MOS in Quantity} = \frac{\text{Profit}}{\text{Contribution per unit}}$$

$$13) \text{ MOS in Value} = \text{MOS in Quantity} \times \text{SP per unit}$$

$$14) \text{ Variance Cost ratio} = 100\% - \text{P.V. Ratio}$$

$$15) \text{ Sales Value @ indifference point} = \frac{\text{Difference between Fixed Costs}}{\text{Difference between PV Ratios}}$$

$$16) \text{ Sales Quantity @ Indifference point} = \frac{\text{Difference between Fixed Costs}}{\text{Difference between Contribution per unit}}$$

$$17) \text{ Sales Value} = \frac{\text{Fixed Costs} + \text{Profit}}{\text{PV Ratio}}$$

$$18) \text{ Sales Quantity} = \frac{\text{Fixed Costs} + \text{Profit}}{\text{Contribution per unit}}$$

$$19) \text{ P.V. Ratio} = \frac{\text{Difference in Profit}}{\text{Difference in Sales}}$$

$$20) \text{ Cost Indifference Point} = \frac{\text{Difference in Fixed Cost}}{\text{Difference in Variable P.u}}$$

$$21) \text{ Limiting Factor} = \frac{\text{Contribution p.u}}{\text{Limiting Factor}}$$

(Machine Hour, Labour Hour)