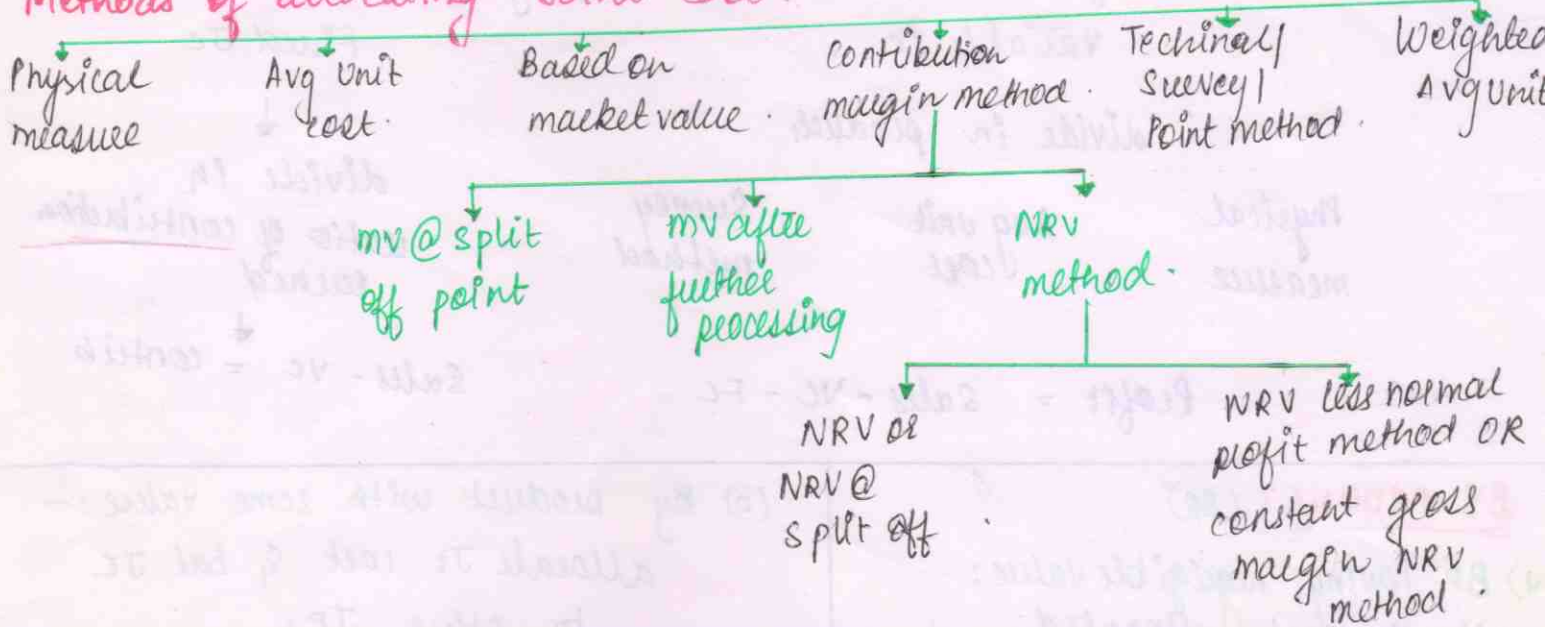


# JOINT & BY PRODUCT COSTING.

Joint products : high value products.

By products : incidental waste or negligible value products.

## Methods of allocating Joint cost :-



- ① Physical measure: based on OUTPUT or INPUT of raw material or product.
- ② Average unit cost: Joint cost is same PER UNIT for all products - on basis of output ratio.
- ③ mv @ split off point: sales value of TOTAL PROD<sup>n</sup> @ split off point.
- ④ mv after FP: mv of total prodn after FP [Sales - FP exp].
- ⑤ NRV or NRV @ split off: in NRV ratio:  $NRV \text{ ratio} = \frac{\text{Sales value} - \text{FP exp.}}{\text{after FP}}$
- ⑥ NRV less NP. OR constant gross margin: Jt cost is balancing figure.

$$Jt \text{ cost} = \text{sales} - \text{Profit} - \text{all exp after split off}$$

$$\text{Total profit of co} = \text{Total sales} - \text{Total Jt cost} - \text{Total exp after split off}$$

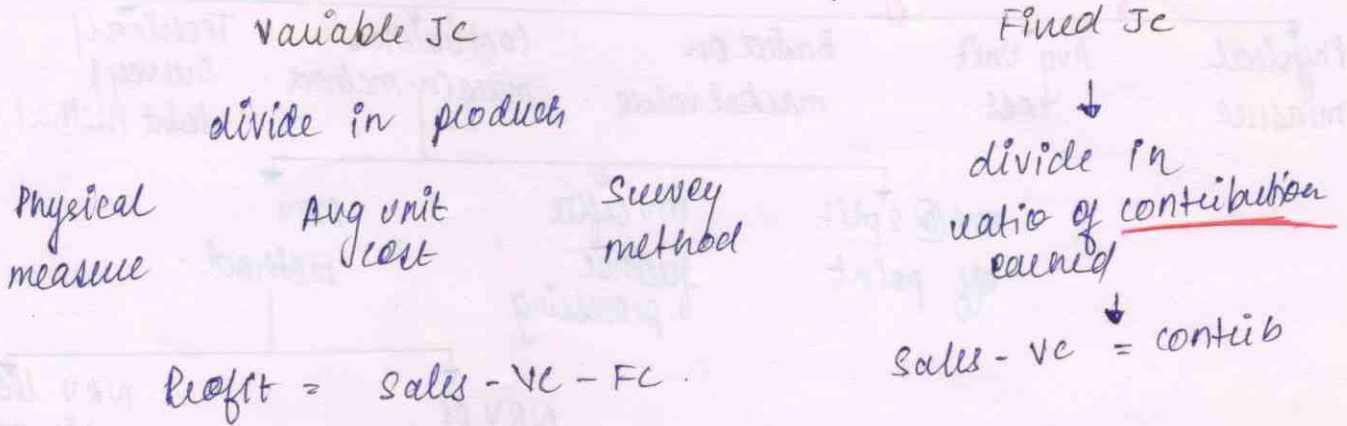
$$\text{Prof \%} = \frac{\text{Total profit}}{\text{Total sales}} \times 100$$

assumed that all Jt products earn same profit

⑦ Survey method: grades or points are given to products

$$Jt \text{ cost (ratio)} = \text{grade} \times \text{output}$$

⑧ Contribution margin method: we segregate Joint cost as VC & FC



BY PRODUCT (BP)

a) BP having negligible value:  
No Jt cost allocated

a) S.P all considered as recovery of JOINT COST and reduced from it.  
Net Jc = Jc - SP(BP)  
↓  
dist among JP.

(b) credit SP to P&L A/c.  
Full JT → JP.

(b) By product with some value:-  
allocate Jt cost & bal Jc to other JP.

Method I: NO profit on BP.

$$Jt \text{ cost} = \text{Sale of BP} - \text{After split of exp on BP}$$

Method II: Profit on BP

$$Jt \text{ cost} = \text{Sales of BP} - \text{after split of Profit (BP) exp}$$

Sales  
(-) Jt cost  
(-) F.P cost  
-----  
Profit  
(-) FC (intotal)  
-----  
Total profit

Jt cost  
(+) F.P cost  
= Total cost  
÷ no. of units produced  
= Cost p.u.  
  
Value of Cl. Stk = Cl. Stk units × Cost p.u.

$$COGS = \text{Units sold} \times \text{Cost p.u.}$$

$$GP\% = \frac{\text{Profit}}{\text{Sales}} \times 100$$

$$\text{Profit} = \text{Sales} - \text{COGS}$$