



# **ACCOUNTING RATE OF RETURN (with Scrap Value & Working Capital)**

# Problem on ARR

Find out ARR for Proposal I & II

- Cost=3,00,000 each
- Estimated Scrap=60,000 each
- Working Capital required=2,50,000 for each machine

Year	1	2	3	4
I Cash Inflows	1,50,000	3,00,000	1,50,000	-
II Cash Inflows	2,00,000	3,00,000	2,50,000	1,50,000



# Formula

$$\text{ARR} = \frac{\text{Average Annual Profit after Taxes}}{\text{Average Investment}} * 100$$

If Working Capital is given,

$$\text{Average Investment} = \frac{\text{Cost} - \text{Scrap}}{2} + \text{WC} + \text{Scrap}$$



Calculation of Average Annual Profit  $I=6,00,000/3$   
 $=2,00,000$

Calculation of Average Annual Profit  $I=9,00,000/4$   
 $=2,25,000$

Cost of Average Investment

$$\begin{aligned} &= (3,00,000-60,000)/2+2,50,000+60,000 \\ &=1,20,000+2,50,000+60,000 \\ &=4,30,000 \end{aligned}$$



- ARR for Proposal I =  $2,00,000/4,30,000*100$   
=46.5%
- ARR for Proposal II =  $2,25,000/4,30,000*100$   
=52.32%