

Summary of Capital Budgeting

Sl.No	concept	Formula	Remarks
1.	Accounting rate of return (ARR)	* <u>original invst model</u> $\frac{\text{Avg PAT}}{\text{org. invst}} \times 100$ * <u>Avg invst model</u> $\frac{\text{Avg. PAT}}{\text{Avg. invst}} \times 100$	Avg invst means $\frac{\text{org. invst} - \text{Salvage}}{2}$ + Salvage + w. Cap
IMPORTANT			
* ARR uses PAT and so if question gives CF, adjust it to PAT & compute ARR. $CF = PAT + \text{Depn}$ / $\therefore PAT = CF - \text{Depn}$ (Solve Illustration-15 ARR calc - must do) * ARR is also called Accounting rate of return.			
2.	Pay back period	* <u>For annuity CF</u> $\frac{\text{Initial invst}}{\text{Annual CF}}$ * <u>For uneven CF</u> cumulative CF and calculate	If nothing is said in the question assume that it is normal PBP concept and not disc PBP.
3.	Discounted PBP	* <u>For annuity CF</u> $\frac{\text{Initial invst}}{\text{PVA F}}$ * <u>For uneven CF</u> cumulative DCF and calculate	
(Must do question - Illustration 15)			

4.	NPV	* <u>DISC1 - DISCO</u>	If profits are given, convert them into CF C solve practical problems 1, 4, 5, 8, 13, 18)
5.	I RR	* If annuity CFs are given <u>DISC1 = DISCO</u> $CIF \times PVAF = COF$ $CIF \times x = COF$ $x = COF / CIF$ USE Trial & error to calc PVAF(x)	whenever, annuity CFs are given, Trial & error can be done using calculator directly. (Illustration 6)
		* IF multiple uneven CFs are given <u>calculate NPV using guess rates</u>	Solve Illustration 7
6.	EAB EAC	* <u>Equated annuity benefits</u> $NPV \div PVAF$	calculated when question is inflow based. (Illustration - 14)
		* <u>Equated annuity cost</u> $DISCO \div PVAF$	calculated when question is outflow based (Practical problem - 6)
7.	Profitability Index	* <u>DISC1</u> <u>DISCO</u> (practical prob 8)	Expressed in times. Used for ranking NPV projects.