1.	**Amount of Rs. P/ at the end of n^{th} year will be A=**	**$P\times (1+ i)^n$**
2.	**Then (Present Value) P**	$\frac{1}{(1+ i)^n}$
3.	**THE AMOUNT OF ₹.1 PER ANNUM(S)** **The following three points are to be noted:** (i) Re. 1/- becomes due to be invested at the-end of the year, (ii) Next Re. 1/- gets added at the end of each year, (iii) Last Re. 1/- will be added at the end of the period	$\frac{A-1}{i}$ $S = \frac{(1+ i)^n-1}{i}$
4.	Annual Sinking Fund Co-efficient=Ic	$Ic=\frac{1}{S}$ $=\frac{i}{(1+i)^n-1}$
5.	**Y.P. (Single Rate)**	**= Amount of ₹.1 pa × PV of ₹.1** $= \frac{[(1+i)^n - 1)]}{i} \times \frac{1}{(1+ i)^n}$ $= \frac{[(1+i)^n)]}{i.(1+ i)^n} - \frac{1}{i.(1+ i)^n}$ $= \frac{1}{i} - \frac{1}{i.(1+ i)^n}$ $=\frac{1}{i}\left(1 - \frac{1}{(1+ i)^n}\right)$
6.	**Y.P. in perpetuity**	$= \frac{1}{i}$
7.	Y.P. Reversion to perpetuity • In this case though the incomes continues up to the perpetuity, but starts at some future date. Such incomes are known as deferred incomes and as Y.P. for non-income period is not available, Y.PR for deferred income can be worked out from the following equation Therefore;	Y.P.Reversion $=\frac{1}{i}-\frac{1}{i}\left(1 - \frac{1}{(1+ i)^n}\right)$ **where i = Rate of interest** **n= Number of years for non-income period**

	Y.P. for deferred income of = Y.P. in perpetuity- Y.P. for the non-income period on a reversion to a perpetuity Single rate basis	
8.	**YEAR'S PURCHASE (DUAL RATE)** • This is the CV (Capitalised Value) of the right to receive **₹.**1 at the end of each year for N years at i compound interest, but allowing sinking fund S to recoup **₹.**1 after N years. • Assume the rate of interest for **₹.**1= i & SF = Ic • Total income = i + Ic	$\frac{1}{i+Ic}$ $=\frac{1}{i+\frac{i}{(1+i)^n-1}}$
9.	D – **annual depreciation=** **(Straight line method)**	$\frac{Original\ cost-scrap\ value}{life\ in\ years}=\frac{C-S}{n}$ **Where, C – Original cost or Replacement Value** **S – Scrap value or Salvage value** **n - life of the property in years**
10.	As per constant percentage method Let C – Original cost or Replacement Value S – Scrap value or Salvage value n - life of the property in years p- Constant percentage of depriciation	**Value of property at the end of n year if percentage "P" is known** $=C(1-p)^n$ **p** $= 1-(\frac{S}{C})^{1/n}$ Value of property at the end of m year $= C(1-p)^m$ $=C(1-(1-(\frac{S}{C})^{m/n}$ **Written down value (W.D.V.) at the end of n year** $=C(1-p)^n$

11.	Sinking fund method	***The process for arriving at the Depreciation percentage involves three stages:*** a) To find out the annual sinking fund at suitable able rate of interest for total life of the building Ic=$\frac{i}{(1+i)^n-1}$ Where **n= total life of building** a) To find out the accumulated amount by depositing the annual amount of sinking fund at suitable rate of interest for the age of building A=$\frac{(1+i)^n-1}{i}$ **Where n= age of building** b) The multiplication of a & b gives the Depreciation percentage to be applied to the prime cost to arrive at amount of Depreciation. Ic×A = Sinking fund depreciation