

- **compound Interest** is interest paid on the original principal of a deposit or loan and also on the accumulated interest.
- The addition of interest to the principal is called *compounding*
- Interest can be compounded periodically.

$$A = P\left(1 + \frac{R}{n}\right)^{nt} \quad (1)$$

$$I = A - P \quad (2)$$

- A= Accumulated Balance or amount
- P= Principal
- R= Annual rate (in decimal)
- n= Number of compounding periods per year.
- T= time
- I= Interest