Topic No: 04
Topic Name: Interest
Subject: Mathematics

Interest:

1. **Principal:** The money borrowed or lent out for a certain period is called the principal.
2. **Interest**: Extra money paid for using other's money is called interest.
3. **Simple Interest:** If the interest on a certain sum borrowed for certain period is reckoned uniformly, then it is called simple interest

So, Amount = Principal + simple interest (P+S.I)

Formula:

- **Simple Interest:**

If Principal =P, Rate=R% per annum and time = T years. Then

1. S.I= $\frac{P \times R \times T}{100}$
2. P = $\frac{100 \times S.I}{R \times T}$
3. R= $\frac{100 \times S.I}{P \times T}$
4. T= $\frac{100 \times S.I}{P \times R}$

The type of above interest is called simple interest.

- **Compound Interest:**

There is another method of computing interest is called compound interest. In computing compound interest, the interest is periodically added to the amount (or principal) which is earning interest.

The basic formula for compound interest problem is

1. Compound interest: compound amount – principal
2. Compound amount = principal (1+ $\frac{Rate}{100})^{Time}$