CHAPTER 10

Simple Interest - Simple Interest or S.I. is the method applied to find out the interest when a principal amount is lent at a specific rate of interest and specified time duration.

- **Formula to Calculate Simple Interest -** Simple interest is given by the following formula:

  S.I = (P * R * T)/100.

  Where P - the principal amount

  R - the rate of interest in percentage

  T - the time period in years.

- **Formula to Calculate the Total Amount -** The total amount which is payable after a duration of T years is found by the formula:

  Amount (A) = Principal (P) + Simple Interest (S.I)

- **The Formula For S.I in Months -** If one is given the time duration in months then the formula to calculate the Simple Interest would be:

  S.I = (P * n * R)(12 * 100), where n is the number of months.

Let Us Understand These Concepts With A Few Problems:

- Mr.X takes a loan from a bank for Rs 20,000, which lends the money at a 10% rate of interest. What is the total amount payable by Mr.X to the bank after 5 years:

  To get the total amount due, let us first calculate the Simple Interest which is, S.I = (P * R * T)/100 = (20,000 * 10 * 5)/100 = 10,000

  Total Amount payable after 5 years = P + S.I = 20,000 + 10,000 = 30,000

- Ms. Y pays a total amount of 9000 to Mr. Z for an amount of 7000 lent by Mr. Z to Ms. Y for 2 years. Calculate the rate of interest that Mr.Z charges Ms. Y on the amount lent.

  Amount = S.I + P

  S.I = Amount - P = 9000 - 7000 = 2000