VIDYA BHAWAN, BALIKA VIDYAPITH

Shakti Utthan Ashram, Lakhisarai-811311(Bihar)

(Affiliated to CBSE up to +2 Level)

CLASS: YII SUB.: MATHS DATE: 20-07-2021

Simple Interest

Important Terms : The money borrowed or lent out for a certain period of time is called the **principal** or **sum.**

Interest: The additional money paid by the borrower in lieu of the money used by him is called interest. Amount: The total money paid back to the lender is called amount.

Amount = Principal + Interest

Rate: Interest on Rs. 100 for 1 year is called rate per cent per annum (abbreviated as rate % p.a.)
Thus, if rate = 9% per annum, then it means that the interest on Rs. 100 for 1 year is Rs. 9.

Simple Interest: If interest is reckoned uniformly on the original principal throughout the loan period then the interest is called simple interest, abbreviated as S.I.

Formula:

Let Principal = Rs. P, Rate = R% per annum and Time = T years.

Then, we have

SOLVED EXAMPLES

- Find the simple interest on Rs. 12000 at 8% p.a. for 3 years. Find the amount also.
- Sol. Principal (P)= $R \times 12,000$

Time (T) = 3 years

Rate (R)=8% Per annum

S.I.=
$$\frac{12,000 \times 8 \times 3}{100}$$
 = R × 2,880

Amount = 12,000 + 2,880

$$= Rs. 14,880$$

- 2. Rohan deposited Rs. 32000 with a company at 12.5% per annum for 3 years at compound interest. How much interest did he get at the expiry of the period?
- Sol. Principal = Rs. 32000

Time = 3 years

Rate = 12.5% per annum

We know that, $A = P (1 + R)_{\infty}^{n}$

$$\therefore A = Rs.32000 \left(1 + \frac{12.5}{100}\right)^3$$

$$= Rs.32000 \left(1 + \frac{1}{8}\right)^3 = Rs.32000 \times \frac{9}{8} \times \frac{9}{8} \times \frac{9}{8}$$

$$= Rs. \frac{91125}{2} = Rs. 45562.50$$