24.01.2020 EVERWIN VIDHYASHRAM Marks: 20
STD: VIII TT – MATHS Time: 30 min

I. Answer the following:

1. Given: P = ₹4000

R = 5%

T = 2years

$A = P\left(1+\frac{r}{100}\right)^n$

$= 4000\left(1+\frac{5}{100}\right)^2 \quad = 4000\left(1+\frac{1}{20}\right)^2$

$= 4000\left(\frac{20+1}{20}\right)^2 \quad = 4000\left(\frac{21}{20}\right)^2$

$= \cancel{4000}^{\cancel{20}^{10}}\left(\frac{21}{\cancel{20}}\right)\left(\frac{21}{\cancel{20}}\right) \quad = 10 \times 441$

A = ₹4410

CI = A – 9 = 4410 – 4000 CI = ₹410

2. P = ₹1000 R = 10%

n = $1\frac{1}{2}$ years n = $\frac{3}{2}$

$A = P\left(1+\frac{r}{200}\right)^{2n} \quad = 1000\left(1+\frac{\cancel{10}}{\cancel{200}}\right)^{2\left(\frac{3}{\cancel{2}}\right)}$

$= 1000\left(\frac{21}{20}\right)^3 \quad = 1\cancel{000}\left(\frac{21}{\cancel{20}}\right)\left(\frac{21}{\cancel{20}}\right)\left(\frac{21}{\cancel{20}}\right)$

$A = \frac{9261}{8}$ = ₹1157.62

CI = A – 9

= 1157.62 – 1000 = CI = ₹157.62

II. Write in our words:

3. CI = Amount – Principal 4. 14 5. $A = P\left(1+\frac{r}{100}\right)^n$

6. Compound interest 7. SI = $\frac{PTR}{100}$