Simple Interest MCQ with Answers Pdf

1. The interest earned on Rs. 15000 in 3 years at simple interest is Rs. 5400. Find the rate of interest per annum.

a. 11.5%

b. 12%

c. 12.5%

d. 15%

Ans: B

$$\text{Rate} = \frac{\text{S.I.}\times 100}{\text{Principal}\times\text{Time}} = \frac{5400\times 100}{15000\times 3}$$

$$= 12\% \text{ per annum.}$$

2. At what rate percent of simple interest will a sum of money double itself in 12 years?

(a) $8\frac{1}{4}\%$

(b) $8\frac{1}{3}\%$

(c) $8\frac{1}{2}\%$

(d) $9\frac{1}{2}\%$

Ans: B

Let sum = ₹ x. Then, S.I. = ₹ x.

$$\therefore \quad \text{Rate} = \left(\frac{100\times\text{S.I.}}{P\times T}\right) = \left(\frac{100\times x}{x\times 12}\right)\% = \frac{25}{3}\% = 8\frac{1}{3}\%.$$

3. Rahul borrowed a sum of Rs. 1150 from Amit at the simple interest rate of 6 p.c.p.a. for 3 years. He then added some more money to the borrowed sum and lent it to Sachin for the same time at 9 p.c.p.a. simple interest. If Rahul gains Rs. 274.95 by way of interest on borrowed sum as well as his own amount from the whole transaction, then what is the sum lent by him to Sachin?

a. Rs. 1200

b. Rs. 1285

c. Rs. 1690

d. Rs. 1785

Ans: D

Let the money added by Rahul be ₹ x.

Then, $\dfrac{(1150 + x) \times 9 \times 3}{100} - \dfrac{1150 \times 6 \times 3}{100} = 274.95$

$\Leftrightarrow$ $1150 \times 27 + 27x - 1150 \times 18 = 27495$

$\Leftrightarrow$ $27x + 1150 \times (27 - 18) = 27495$

$\Rightarrow$ $27x = 27495 - 10350 = 17145 \Rightarrow x = 635.$

So, sum lent by Rahul to Sachin = ₹ $(1150 + 635)$ = ₹ 1785.

4. What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?

a. 1 : 3

b. 1 : 4

c. 2 : 3

d. Data inadequate

Ans: C

Let the principal be P and rate of interest be $R\%$

$\therefore$ Required ratio $= \left[\dfrac{\left(\dfrac{P \times R \times 6}{100} \right)}{\left(\dfrac{P \times R \times 9}{100} \right)} \right] = \dfrac{6PR}{9PR} = \dfrac{6}{9} = 2:3.$

5. If simple interest on Rs. 600 for 14 years and on Rs. 600 for 2 years combined together is Rs. 180, find the rate of interest

a. 4%

b. 5%

c. 5.5%

d. 6.25%

Ans: B

Let the rate of be $R\%$ p.a.

Then, $\left(\dfrac{600 \times R \times 4}{100}\right) + \left(\dfrac{600 \times R \times 2}{100}\right) = 180$

$\Rightarrow$ 2400R + 1200R = 18000 $\Rightarrow$ 3600R = 18000

$\Rightarrow$ R = 5%.