Simple Interest Questions for IBPS, SBI PO, SO, Clerk Exams Pdf

1. Rs. 6000 becomes Rs. 7200 in 4 years at a certain rate of simple interest. If the rate becomes 1.5 times of itself, the amount of the same principal in 5 years will be

a. Rs. 8000

- b. Rs. 8250
- c. Rs. 9000
- d. Rs. 9250

Ans: B

$$P = ₹ 6000, \text{ S.I.} = ₹ (7200 - 6000) = ₹ 1200, T = 4 \text{ yrs.}$$

$$\therefore \quad \text{Rate} = \left(\frac{100 \times 1200}{6000 \times 4}\right)\% = 5\%.$$

New rate = $(1.5 \times 5)\% = 7.5\%.$
New S.I. = ₹ $\left(\frac{6000 \times 7.5 \times 5}{100}\right) = ₹ 2250.$

2. Sujitha invested Rs. 7500 at simple interest @ 11 p.c.p.a. She further invested some amount at simple interest @ 15 p.c.p.a. Total interest earned at the end of the year became 12 p.c.p.a. Find the amount invested at the rate of 15 p.c.p.a.

a. Rs. 2000

b. Rs. 2500

c. Rs. 3000

d. Rs. 3500

Ans: B

Let the required sum be $\gtrless x$. Then, 11% of 7500 + 15% of x = 12% of (7500 + x)

$$\Rightarrow \left(\frac{11}{100} \times 7500\right) + \left(\frac{15}{100}x\right) = \frac{12}{100}(7500 + x)$$

$$\Rightarrow 82500 + 15x = 90000 + 12x \Rightarrow 3x = 7500$$

$$\Rightarrow x = 2500.$$

Hence, required sum = ₹ 2500.

3. 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

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Let sum = $\mathbb{Z} x$. Then, S.I. = $\mathbb{Z} x$.

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

- 4. At the rate of \$\$8{1}/{2}\$\$% p.a. simple interest, a sum of Rs.4800 will earn how much interest in 2 years 3 months?
 - a. Rs. 796
 - b. Rs. 816
 - c. Rs. 918
 - d. Rs. 956

Ans: C

$$P = ₹ 4800, R = 8\frac{1}{2}\% = \frac{17}{2}\%,$$

$$T = 2 \text{ yrs 3 mths} = 2\frac{1}{4} \text{ yrs} = \frac{9}{4} \text{ yrs.}$$

$$\therefore \text{ S.I.} = ₹ \left(4800 \times \frac{17}{2} \times \frac{9}{4} \times \frac{1}{100}\right) = ₹ 918.$$

5. Rs. 1000 is invested at 5% per annum simple interest. If the interest is added to the principal after every 10 years, the amount will become Rs. 2000 after

a. 15 years

- b. \$\$16{2}/{3}\$\$
- c. 18 years
- d. 20 years

Ans: B

Amount after 10 years =
$$\overline{\mathbf{x}} \begin{bmatrix} 1000 + \frac{1000 \times 5 \times 10}{100} \end{bmatrix} = \overline{\mathbf{x}} 1500.$$

Now, S.I. = $\overline{\mathbf{x}} (2000 - 1500) = \overline{\mathbf{x}} 500, P = \overline{\mathbf{x}} 1500, R = 5\%.$
 \therefore Time = $\left(\frac{500 \times 100}{1500 \times 5}\right)$ yrs = $6\frac{2}{3}$ yrs.
Hence, required time = $\left(10 + 6\frac{2}{3}\right)$ yrs = $16\frac{2}{3}$ yrs.

6. 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

Rate =
$$\frac{S.I.\times100}{Principal\timesTime} = \frac{5400\times100}{15000\times3}$$

= 12% per annum.

7. 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 =
$$\overline{\mathbf{x}}$$
. Then, S.I. = $\overline{\mathbf{x}}$.
 \therefore Rate = $\left(\frac{100 \times \text{S.I.}}{P \times T}\right) = \left(\frac{100 \times x}{x \times 12}\right)\% = \frac{25}{3}\% = 8\frac{1}{3}\%.$

8. 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 \mathbb{Z} *x*.

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

⇔ 1150 × 27 + 27x - 1150 × 18 = 27495
⇔ 27x + 1150 × (27 - 18) = 27495
⇒ 27x = 27495 - 10350 = 17145 ⇒ x = 635.
So, sum lent by Rahul to Sachin = ₹ (1150 + 635) = ₹ 1785.

9. 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

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

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

10. 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, $\left(\frac{600 \times R \times 4}{100}\right) + \left(\frac{600 \times R \times 2}{100}\right) = 180$ $\Rightarrow 2400R + 1200R = 18000 \Rightarrow 3600R = 18000$ $\Rightarrow R = 5\%$.

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