Simple Interest Questions for Bank, SSC and Railway Exams – Simple Interest Quiz at Smartkeeda.

Simple Interest Quiz 1

Directions: Kindly study the following Questions carefully and choose the right answer:

1. A certain amount earns simple interest of Rs. 1750 after 7 years. Had the interest been 2% more, how much more interest would it have earned?

A. Rs. 35
B. Rs. 350
C. Rs. 245
D. Can't be determined
E. None of these

2. The simple interest on a sum of money will be Rs. 200 after 5 yr. In the next 5 year, principal is tripled. What will be the total interest at the end of the 10th year?

A. Rs. 650
B. Rs. 850
C. Rs. 800
D. Can't be determined
E. None of these

3. A sum of money becomes 9 times in 20 years. Find the 10 times of rate of interest.

A. 350%
B. 45%
C. 400%
D. 250%
E. None of these

4. A sum becomes 6 fold at 5% per annum. At what rate, the sum becomes 12 fold?

A. 10%
B. 12%
C. 9%
D. 11%
E. None of these

5. The rates of simple interest in two banks x and y are in the ratio of 10 : 8. Rajini wants to deposit her total savings in two banks in such a way that she receives equal half-yearly interest from both. She should deposit the savings in banks x and y in the ratio of

A. 4 : 5
B. 3 : 5
C. 5 : 4
D. 2 : 1
E. None of these

6. The simple interest accrued on an amount of Rs. 12450 at the end of 6 years is Rs. 8964. What is the rate of interest per year?

A. 8%
B. 14%
C. 10%
D. 12%
E. None of these

7. The simple interest on a sum of money will be Rs. 600 after 10 years. If the principal is trebled after 5 years, what will be the total interest at the end of the tenth year?

A. Rs. 600
B. Rs. 900
C. Rs. 1200
D. Rs. 1500
E. None of these

8. According to a new plan rolled out by HISP Bank, the rate of simple interest on the sum of money is 8% pa for the first two years, 10% pa for the next three years and 6% pa for the period beyond the first five years. The simple interest accrued on a sum for a period of eight years is Rs. 12,800. Find the sum

A. Rs. 24000
B. Rs. 16000
C. Rs. 15000
D. Rs. 13500
E. None of these

9. A certain sum of money amounts to Rs. 720 in 2 years and ⬚ 870 in 4.5 years. Find the sum and the rate of interest.

A. Rs. 600, 10%
B. Rs. 600, 12%
C. Rs. 620, 12%
D. Rs. 660, 12%
E. None of these

10. Rs. 16000 was invested for three years, partly in scheme A at the rate of 5% simple interest per annum and partly in scheme B at the rate of 8% simple interest per annum. The total interest received at the end was Rs. 3480. What amount of money was invested in scheme A?

A. Rs. 6000
B. Rs. 6500
C. Rs. 4500
D. Rs. 4000
E. Rs. 8000
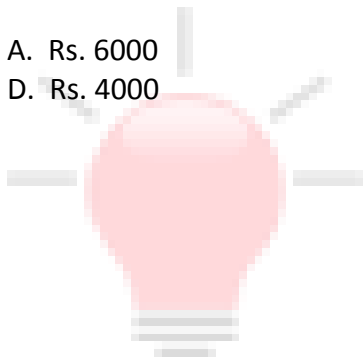
Correct Answers:

1	2	3	4	5	6	7	8	9	10
D	C	C	D	A	D	C	E	A	D

Explanations:

1. When we solve this question, we find that we have two variables P (Principal) and R (Initial assumed rate of interest) in the R.H.S. of the SI equation. Therefore, the correct answer can't be determined.

2. According to the question,
SI for first 5 yrs = Rs 200
SI for next 5 yrs = Rs 200 × 3 = Rs 600
∴ Total SI for 10 yr = Rs. (200 + 600) = Rs. 800.
When principal is trebled, then SI for 5 yr will also be treble and hence SI for next 5 yr will be Rs. (200 × 3) = Rs. 600
Hence, option C is correct.

3. According to the formula,

$$\text{Rate} = \frac{100\,(n-1)}{T}$$

$$= \frac{100\,(9-1)}{20} = \frac{800}{20} = 40\%$$

∴ 10 times of 40% = 400%
Hence, option C is correct.

4. Method I:
Given, $R_1 = 5\%$, n = 6, m = 12
According to the formula,

$$R_2 = \frac{m-1}{n-1} \times R_1$$

$$= \frac{12-1}{6-1} \times 5 = \frac{11}{5} \times 5 = 111\%$$

Method II:
SI at 5% = 6P − P = 5P

$$\therefore\ 5P = \frac{P \times 5 \times T}{100}$$

⇒ T = 100 yr
Now, for new rate (R),

$$11P = \frac{P \times R \times 100}{100}$$

∴   R = 11%

Hence, option D is correct.

5. Let the savings be P and Q and rates of SI be 10x and 8x, respectively.

Then, $P \times 10x \times \dfrac{1}{2} \times \dfrac{1}{100} = Q \times 8x \times \dfrac{1}{2} \times \dfrac{1}{100}$

$\Rightarrow 10P = 80$

$\therefore \quad \dfrac{P}{Q} = \dfrac{8}{10} = \dfrac{4}{5}$

∴   P : Q = 4 : 5.

Hence, option A is correct.

6. SI = 8964 and T = 6 yrs, P = 12450

Then, rate = $\dfrac{8964 \times 100}{12450 \times 6}$ = 12%

Hence, option D is correct.

7. Given that

Simple interest for 10 years = Rs. 600

Therefore, SI for 1 year = Rs. 60

Therefore, SI for 5 years = Rs. 300

Now, if the principal is trebled, the interest will also be trebled.

Therefore, SI for next 5 years = Rs. 300 × 3 = Rs. 900

Hence, total interest after 10 years = 300 + 900 = Rs. 1200

Hence, option C is correct.

8. Total rate of interest = (2 × 8 + 3 × 10 + 3 × 6)%

= (16 + 30 + 18)% = 64%

Let the sum be x, then

∴   64% of x = 12800

$x = \dfrac{12800 \times 100}{64}$ = 20000/-

Hence, option E is correct.

9. Let the sum be P; the rate of interest be R.

Then, Amount = P + SI

$720 = P + \dfrac{P \times R \times 2}{100}$ ... (i)

$870 = P + \dfrac{P \times R \times 4.5}{100}$ ...(ii)

Eq. (ii) − (i),

$\dfrac{2.5PR}{100} = 150$

$\Rightarrow$ PR = 6000   ...(iii)

Now, from eq (i),

$720 = P + \dfrac{6000 \times 2}{100}$

$\Rightarrow$ P = 720 − 120 = Rs. 600

From eq. (iii),

600 × R = 6000

$\Rightarrow$ R = 10%

Hence, option A is correct.

10. Let the sum invested in scheme A be Rs. x.

Then the amount invested in scheme B = Rs. (16000 − x)

Now, $\dfrac{x \times 5 \times 3}{100} + \dfrac{(16000 - x) \times 3 \times 8}{100} = 3480$

$\Rightarrow$ 15x + 384000 − 24x = 3480 × 100

$\Rightarrow$ 9x = 384000 − 348000 = 36000

$\therefore$ x = $\dfrac{36000}{9}$ = Rs. 4000

Hence, option D is correct.