

## SI CI CAT Questions

It is important that candidates practice SI CI CAT Questions so that they are able to ace it in the exam. Candidates can check the SI CI CAT Questions given below to understand the types of questions that can be asked in the exam.

**Question 1:** What Principal amount will produce Rs. 500 as simple interest at an interest rate of 5% per annum in 6 years?

- A. Rs. 1999.5
- B. Rs. 1666.6
- C. Rs. 15000
- D. Rs. 1444.5

**Answer:** B

### Explanation

Total Interest = Rate of Interest  $\times$  Time

$$= 6 \times 5 \%$$

$$= 30\%$$

Therefore, 30% = 500

$$\text{Required principal Amount (100\%)} = \frac{500}{30} \times 100 = \text{Rs. } 1666.66$$

**Question 2:** In how many years will the principal of Rs. 1000 will give an interest of Rs. 200 at an interest rate of 5%?

- A. 5
- B. 4
- C. 4.5
- D. 3.5

**Answer: B**

**Explanation:**

Principal = Rs. 1000

At 5% interest rate, interest per year = Rs. 50

Number of years required for Rs. 200 interest =  $200 \div 50 = 4$

**Question 3:** Akash invested a certain sum in a scheme offering simple interest for 5 years at the interest rate of 8%. Rohit invested three times the sum invested by Akash in the same scheme for 2 years. If the difference between the amounts of Rohit and Akash after respective periods is Rs. 1648, what was the sum invested by Rohit?

- A. Rs. 56400
- B. Rs. 64100
- C. Rs. 76200
- D. Rs. 61800

**Answer: D**

**Explanation**

Let the sum invested by Akash be Rs.  $x$ .

Then the sum invested by Rohit = Rs.  $3x$

According to question,

$$2 \times \frac{8}{100} \times 3x - 5 \times \frac{8}{100} \times x = 1648$$

$$\Rightarrow \frac{8}{100} \times x = 1648$$

$$\Rightarrow x = 20600$$

Sum invested by Rohit =  $3x = 3 \times 20600 = \text{Rs. } 61800$

**Question 4:** The rate of simple interest of a sum is 6% per annum for the first 3 months, next five months the rate of interest is 8% per annum and 5% per annum for the period of beyond 8 months. If the total simple interest is Rs 3510 for the period of one year then find what is the sum?

- A. Rs. 56100
- B. Rs. 54000
- C. Rs. 56000
- D. Rs. 46100

**Answer: B**

**Explanation**

Let the sum be Rs.  $P$ .

$$\text{SI for the period of one year} = \frac{P \times (6 \times 3 + 5 \times 8 + 5 \times 4)}{1200} = \frac{78P}{1200} = 3510$$

$$\text{Sum} = \frac{1200}{78} \times 3510 = \text{Rs. } 54000$$

**Question 5:** Arun invested Rs. 10000 at the rate of 10% compound interest. If in first year interest is calculated half yearly and annually in second year, then find the total interest received by Arun after 2 years.

- A. Rs. 2127.5
- B. Rs. 2425.5
- C. Rs. 2724.2
- D. Rs. 3225.5

### Explanation

$$\text{Half yearly rate} = \frac{10}{2} = 5\%$$

$$\text{Overall rate} = 5 + 5 + \frac{5 \times 5}{100} = 10.25\%$$

$$\text{Interest earned in first year} = 10000 \times \frac{10.25}{100} = \text{Rs. } 1025$$

$$\text{Interest earned in second year} = (10000 + 1025) \times \frac{10}{100} = \text{Rs. } 1102.5$$

$$\text{Total Interest earned by Arun} = 1025 + 1102.5 = \text{Rs. } 2127.5$$

**Question 6:** David deposited Rs. Q at 20% per annum and Charls deposited Rs. (Q – 8000) at the rate of 10% per annum. If at the end of two years, total compound interest received is Rs. 8720, then find the capital invested by Charls.

- A. Rs. 6000
- B. Rs. 8000
- C. Rs. 10000
- D. Rs.9000

**Answer:** B

Total interest of David =  $[20 + 20 + (20 \times 20)/100]\%$  of  $Q = 44\%$  of  $Q = 0.44Q$   
Total interest of Charls =  $[10 + 10 + (10 \times 10)/100]\%$  of  $(Q - 8000) = 21\%$  of  $(Q - 8000) = 0.21Q - \text{Rs. } 1680$

According to question

$$0.44Q + (0.21Q - \text{Rs. } 1680) = \text{Rs. } 8720$$

$$\Rightarrow 0.65Q - \text{Rs. } 1680 = \text{Rs. } 8720$$

$$\Rightarrow 0.65Q = \text{Rs. } 10400$$

$$\Rightarrow Q = \text{Rs. } 16000$$

Hence, Charl's capital =  $(16000 - 8000) = \text{Rs. } 8000$

**Question 7:** Pritam deposited Rs. 'x' in bank A at 30% compound interest and Rs. 'x + 600' in bank B at 36% simple interest for 3 years. If interest earned by him from bank A was Rs. 1107 more than interest earned by him from bank B, then find the value of 'x'.

- A. Rs. 16000
- B. Rs. 12000
- C. Rs. 15000
- D. Rs. 20000

**Answer: C**

**Explanation**

Interest earned by him from bank A =  $x \times \{(1.3)^3 - 1\} = \text{Rs. } 1.197x$

Interest earned by him from bank B

$$= \frac{\{(x + 600) \times 36 \times 3\}}{100} = \text{Rs. } 1.08x + 648$$

According to the data provided in the question, we get

$$1.197x - 1.08x - 648 = 1107$$

$$0.117x = 1755$$

$$x = 15000$$

**Question 8:** The difference between the compound interest and the simple interest received after 3 years on the sum of Rs. 40000 is Rs. 3104. Find the rate of interest for the third year if the rate of interest for the first and second year is 10% and 20% respectively.

- A. 12%
- B. 18%
- C. 24%
- D. 8%

**Answer: B**

**Explanation**

Let the rate of interest for the third year be  $x\%$  p.a.

$$\text{Total SI} = \frac{40000 \times 10 \times 1}{100} + \frac{40000 \times 20 \times 1}{100} + \frac{40000 \times x \times 1}{100}$$

$$= \text{Rs. } 12000 + 400x$$

CI for 2 years when rate is different for different years.

$$\text{CI} = P \times \left(1 + \frac{R_1}{100}\right) \times \left(1 + \frac{R_2}{100}\right) - P$$

$$= 40000 \left(1 + \frac{10}{100}\right) \left(1 + \frac{20}{100}\right) - 40000$$

$$= \text{Rs. } 12800$$

CI for third year

$$= 52800 \times \left(1 + \frac{x}{100}\right) - 52800 = 528x$$

Using the data provided in the question, we get

$$528x + 12800 - (12000 + 400x) = 3104$$

$$128x = 2304$$

$$\Rightarrow x = 18\%$$