

Interest Questions with detailed solutions PDF

Simple and Compound Interest questions are a major type of questions asked in competitive exams. These questions carry a weightage of 1-2 questions (2-4 marks) in SSC exams and 1-2 questions in bank exams. To get a good rank in competitive exams, you should have a great practice of solving this type of questions as they are calculative and can cost you valuable seconds.

Here are some tips for solving Simple and Compound Interest questions: Clear the basic concepts, Use the appropriate formula as there are many different formulas, Practice with diverse examples to enhance calculation speed. Prioritize clarity and accuracy while solving, as mistakes can be costly and avoid get stuck in hefty calculations, instead use shortcuts and tricks.

So, we have attached 10 questions of Simple and Compound Interest for you to practice with. You should aim to solve these questions in less than half a minute for each.

Practice Questions on Simple and Compound Interest

You can also download the Simple and Compound Interest questions and answers pdf. Just click on the **Download PDF** button. So let's start with the very first question.

Q:1 If the sum invested in the F.A.L.T.U. bank at a 20% rate of interest compounded half yearly is Rs.10000. Find the amount after 1 year.

1. Rs 1100
2. Rs 12100
3. Rs 13310
4. Rs 12000

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) This was an easy one. Did get it right?

Q:2 If the simple interest on a certain sum of money at 20% is Rs 2000 annually. What is the compound interest of the 2nd quarter on the same sum and the same rate if compounded quarterly?

1. Rs 475
2. Rs 550
3. Rs 500
4. Rs 525

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) Another piece of cake....Let's score more!

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Q:3 Rohan invested equal amount of money in both Compound and Simple interest at the rate of 11%. After 2 years, the difference in interest amount was Rs. 605. What will be the interest on money put on compound interest after 3 years?

1. Rs. 14563
2. Rs. 18381
3. Rs. 16429
4. Rs. 15312

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) This was not a simple one, don't get stuck in unnecessary calculations!

Q:4 An interest of Rs.290 is obtained when P principal is on the simple interest rate of 12.5% for 4 years. What is the value of P? (In rs.)

1. 525
2. 600
3. 580
4. 725

(**Difficulty:** 4, **Estimated Time:** 25 Seconds) It is not an easy one but I think now you're prepared for it.

Q:5 What will be the amount on a certain sum of Rs 14700 in 2 years at $14\frac{2}{7}$ per annum of compound interest?

1. Rs 19200
2. Rs 10800
3. Rs 12700
4. Rs 16400

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) We're halfway through. Have you got all your questions correct so far?

Q:6 In how much time will Rs 1350 become Rs 1728 at the rate of 8% simple interest?

1. 2.5 years
2. 3.5 years
3. 3 years and 3 months
4. 2 year and 4 months

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(**Difficulty:** 3, **Estimated Time:** 20 Seconds) Should we raise the level of questions?

Q:7 At what rate of compound interest amount of Rs. 1875 will become Rs. 2028 in 2 years?

1. 3%
2. 5%
3. 4%
4. 6%

(**Difficulty:** 2, **Estimated Time:** 15 Seconds) This is a common question! You might have done it in 10 seconds

Q:8 A sum of Rs 2200 gives a simple interest of Rs 242 in 2 years. Find the rate of interest.

1. 5.5%
2. 5%
3. 4.5%
4. 8%

(**Difficulty:** 3, **Estimated Time:** 20 Seconds) The time is ticking. Hurry up!

Q:9 A sum of Rs. 3000 amounts to Rs. 9000 in two years at compound interest. In how many years does the same amount become Rs. 27000?

1. 6 years
2. 8 years
3. 4 years
4. 10 years

(**Difficulty:** 4, **Estimated Time:** 25 Seconds) Practice and get fast with your calculations!

Q:10 The difference between Compound interest and Simple interest for 3 years at 10% per annum is Rs 842. What will be the difference between Compound interest and Simple interest of 2 years if Compound interest is calculated half yearly and Simple interest is calculated annually?

1. Rs. 437.17
2. Rs. 430.17
3. Rs. 421.17

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4. Rs. 425.17

(Difficulty: 3, Estimated Time: 20 Seconds) Did you guess them all correctly?

Answer Key

Let's check out your score in this test.

1. (2)	2. (4)	3. (2)	4. (3)	5. (1)
6. (2)	7. (3)	8. (1)	9. (3)	10. (3)

Comment below your score, considering each question has 1 mark only. If you scored 8 to 10, congratulations! You are one step closer to selection. If you have scored 5 to 8 marks, then you are doing well, keep it up. If you have scored less than 5 marks then you need to work a little harder on this subject. But don't worry, we are here to help you master the subject.

Let's check the answers and solutions and try to find out what went wrong.

Answers and Solutions

Q:1 The correct answer is **Option 2** i.e. **Rs 12100**.

Here, the interest is compounded half-yearly, so the rate of interest is halved and the period of time is doubled.

Thus, $P = \text{Rs.}10000$

$n = 2$ years

Rate of interest = $20/2 = 10\%$

Thus, Amount = $10000 (1 + 10/100)^2$

$\Rightarrow 10000 \times 110/100 \times 110/100 = \text{Rs.}12100$

Q:2 The correct answer is **option 4** i.e. **Rs 525**

Simple interest = $PRT/100$

Compound interest = Amount - principal

Where, Amount = $P[1 + R/100]^2$



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If the interest is compounded quarterly then the rate is equal to one-fourth and time equals to four times.

Let the Principal be x

Then, $2000 = [x \times 20 \times 1]/100$

$\Rightarrow x = 10000$.

Now, $R = (20/4)\% = 5\%$

Time = 4 quarter

But we have to find CI only for the 2nd quarter

The effective interest of 2 quarters = $5\% + 5\% + \{(5 \times 5)/100\}\% = 10.25\%$

The interest of 1st quarter = 5%

The interest only for 2nd quarter = $10.25\% - 5\% = 5.25\%$.

Hence, $CI = (10000 \times 5.25)/100 = 525$

The compound interest only for 2nd quarter = Rs 525

Q:3 The correct answer is **option 2** i.e. **Rs. 18381**.

We know, the interest rate is 11% and difference in CI and SI for 2 years is Rs. 605.

Or, $(P \times 11 \times 11)/(100 \times 100) = 605$

$\Rightarrow P = 6050000/121 = \text{Rs. } 50000$

Now, interest earned in 3 years:

$\Rightarrow (50000 \times 1.11 \times 1.11 \times 1.11) - 50000$

$\Rightarrow 68381.55 - 50000$

$\Rightarrow \text{Rs. } 18381.55 = \text{Rs. } 18381$ (Approx.)

Q:4 The correct answer is **option 3** i.e. **580**

Simple interest = $(P \times r \times t)/100$

Where P, r, t are principal, rate of interest, and time period.

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$$\Rightarrow 290 = (P \times 12.5 \times 4)/100$$

$$\Rightarrow P = 290 \times 2$$

$$\Rightarrow P = \text{Rs.} 580$$

Q:5 The correct answer is **option 1** i.e. **Rs 19200**.

$$A = P(1 + R/100)^2, \text{ For 2 years}$$

$$\text{Given } P = 14700, R = 14\frac{2}{7}\% = (100/7)\%$$

$$A = 14700(1 + 100/700)^2 = 14700(8/7)^2$$

$$\Rightarrow 14700 \times 64/49 = 300 \times 64 = \text{Rs } 19200$$

Q:6 The correct answer is **option 2** i.e. **3.5 years**

$$\text{Simple interest} = (\text{principal} \times \text{rate} \times \text{time})/100$$

$$\text{Amount} = \text{Principal} + \text{S.I}$$

$$\text{Given, } A = 1728$$

$$P = 1350$$

$$R = 8\%$$

$$\text{Time} = \{(A - P) \times 100\}/(P \times r)$$

$$= \{(1728 - 1350) \times 100\}/1350 \times 8$$

$$= (378 \times 100)/(1350 \times 8)$$

$$= 3.5 \text{ years}$$

Q:7 The correct answer is **option 3** i.e. **4%**.

$$\text{Amount} = \text{Rs. } 1875$$

$$\text{Amount after including compound interest of 2 years} = \text{Rs. } 2028$$

$$\text{Rate of Interest} = 100[(A/P)^{1/t} - 1]\%$$

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$$\begin{aligned} &\Rightarrow 100[(2028/1875)^{1/2} - 1]\% \\ &= 100[(676/625)^{1/2} - 1]\% \\ &= 100[(26/25 - 1)]\% \\ &= 4\% \end{aligned}$$

Q:8 The correct answer is **option 1** i.e. **5.5%**.

Simple interest = (Principal \times rate \times time)/100

Let the rate of interest = R%

$$242 = (2200 \times R \times 2)/100 \Rightarrow R = 242/44 = 11/2 = 5.5\%.$$

The required rate of interest = 5.5%

Q:9 The correct answer is **option 3** i.e. **4 years**.

$$A = P(1 + R/100)^t$$

where, P = principal, R = rate, t = time

A = 9000, P = 3000 for 2 years

We have to find the time in which the amount becomes 27000

By formula,

$$\Rightarrow 9000 = 3000(1 + R/100)^2$$

$$\Rightarrow 9000/3000 = (1 + R/100)^2$$

$$\Rightarrow 3 = (1 + R/100)^2$$

$$\text{Squaring both sides} \Rightarrow 9 = (1 + R/100)^4$$

$$\text{Multiply by 3000 on both sides} \Rightarrow 27000 = 3000(1 + R/100)^4$$

So, after 4 years the amount becomes Rs 27000

Q:10 The correct answer is **Option 3** i.e. **Rs. 421.17**.

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(Compound Interest - Simple Interest) for 3 years = Rs 842

Rate of interest = 10% p.a.

$$SI - CI = P \times (R/100)^2 \times (300 + R)/100$$

$$SI - CI = P \times (R/100)^2 \times (300 + 10)/100$$

$$842 = P \times (10/100)^2 \times (300 + 10)/100$$

$$842 = P \times (10/100)^2 \times (310)/100$$

$$\text{Principal} = (842 \times 100 \times 10)/31$$

$$P = 842000/31$$

$$P = \text{Rs. } 27161.3$$

$$\text{S.I. for 2 years} = (PRT/100) = (27161.3 \times 10 \times 2)/100 = \text{Rs. } 5432.26$$

$$\begin{aligned} \text{C.I. for 2 years when invested half-yearly} &= P(1 + R/200)^{2t} - P = 27161.3(1 + 10/200)^4 - 27161.3 \\ &= 27161.3(21/20)^4 - 27161.3 = 33014.73 - 27161.3 = \text{Rs. } 5853.43 \end{aligned}$$

$$\text{Difference between Compound Interest and Simple Interest for 2 years} = \text{Rs. } (5853.43 - 5432.26) = \text{Rs. } 421.17$$

So, this is it for today. We will meet again with another new topic. Till then, you can practice the questions again by downloading the PDF of Simple and Compound Interest.