

### Simple Interest and Compound Interest

1. The simple interest on a certain principal for a time period of 4 years at 8% p.a. is ₹1280. If the same principal is invested at 10% p.a. compound interest compounded annually, what will be the amount after 2 years?  
(A) ₹4960 (B) ₹4920  
(C) ₹4800 (D) ₹4840  
(E) None of these
2. A sum of money at compound interest doubles itself in 4 years. In how many years will it be 32 times itself?  
(A) 4 years (B) 8 years  
(C) 16 years (D) 20 years  
(E) 32 years
3. The difference between simple and compound interest on a sum of money for 2 years at 13% per annum is ₹169. The sum is?  
(A) ₹9591 (B) ₹11025  
(C) ₹9785 (D) ₹10000  
(E) Either (a) or (b)
4. Ghanshyam buys a second hand car for ₹70000. The value of the car depreciates at a rate of R% every year. If the car was sold at a price of ₹47068 after two years then, find the value of R.  
(A) 22% (B) 14%  
(C) 18% (D) 16%  
(E) 24%
5. Surbhi lent a certain amount of money at 8% simple interest and after 10 years she received an interest amount of, ₹560 less than the amount she had lent. How much money did she lend?  
(A) ₹7542 (B) ₹6529  
(C) ₹2800 (D) ₹5285  
(E) ₹3863
6. A sum of ₹10,000 is lent at compound interest of 10% per annum. If the amount is lent for two years then what will be the interest amount in 2nd year?  
(A) ₹1200 (B) ₹900  
(C) ₹1100 (D) ₹1500  
(E) ₹800
7. According to a new plan rolled out by HISP Bank, the rate of simple interest on a sum of money is 8% p.a. for the first two years, 10% p.a. for the next three years and 6% p.a. for the period beyond the first five years. Simple interest accrued on a sum for a period of eight years is ₹12,800. Find the sum.  
(A) ₹24,000 (B) ₹16,000  
(C) ₹15,000 (D) ₹13,500  
(E) None of these
8. ₹1500 is given at 12% SI while ₹(1500 + P) is given @ 20% CI. If the difference between both interests at the end of two years is ₹652. Find P.  
(A) 780 (B) 800  
(C) 790 (D) 820  
(E) 850
9. ₹1800 is given at 20% per annum SI while ₹(1800 - P) is given at 30% per annum CI. If the difference between both interests at the end of two years is ₹315. Find P.  
(A) ₹200 (B) ₹300  
(C) ₹400 (D) ₹100  
(E) None of these
10. ₹1750 is given at 14% SI per annum while ₹(1750 + P) is given @ 20% CI per annum. If the difference between both interests at the end of two years is ₹830. Find P.  
(A) 1100 (B) 1150  
(C) 1250 (D) 1300  
(E) 1350

11. A sum of ₹91,00 is borrowed at 20% per annum compounded annually. If the amount is to be paid in two years, the amount will be  
(A) ₹131,040 (B) ₹132,800 .  
(C) ₹132,500 (D) ₹142,300  
(E) None of these
12. A certain sum was invested by a person on SI at 5% per annum. After 6 months, he again made an investment of the same amount on SI at 6% p.a. After a certain period of time, the amount received from both the investments are equal which is ₹4600. Find the sum he has invested in each investment.  
(A) ₹4200 (B) ₹4000  
(C) ₹3800 (D) ₹4100  
(E) ₹3500
- Direction (13 – 17):** There are three persons A, B and C who each invested in two different scheme S<sub>1</sub> and S<sub>2</sub>. A invested ₹80,000 for 2 yr in scheme S<sub>1</sub> and 30,000 for 4 years in scheme S<sub>2</sub>. B invested ₹30,000 for 3 year in S<sub>1</sub> and he did not invest in scheme B. B also obtained a profit of 10,000 by selling his car. C invested ₹50000 for 5 years in scheme S<sub>1</sub> and 10000 for 3 year in scheme S<sub>2</sub>. Total profit obtained from scheme S<sub>1</sub> is 2 lakh and scheme S<sub>2</sub> is 90,000.
13. What is the ratio of total profit obtained by B and profit obtained by C from scheme S<sub>1</sub>  
(A) 23 : 47 (B) 54 : 47  
(C) 36 : 43 (D) 23 : 50  
(E) 27 : 50
14. Profit obtained by A from scheme S<sub>1</sub> is what percent of profit obtained by C from scheme S<sub>2</sub> .  
(A)  $346\frac{7}{9}\%$  (B)  $347\frac{8}{9}\%$   
(C)  $356\frac{7}{9}\%$  (D)  $345\frac{4}{9}\%$   
(E)  $355\frac{5}{9}\%$
15. What is the average of profit attained by A from scheme S<sub>1</sub> and profit of C obtained from scheme S<sub>2</sub> .  
(A) 41000 (B) 42000  
(C) 44000 (D) 55000  
(E) 40000
16. What is the principle ?  
**Quantity I:** A sum is invested for 3 year with CI. It earns 10123.2 ₹ with 12% rate of interest  
**Quantity II:** A sum invested for 4 years with SI. It earns 14400 ₹ with 15% rate of interest.  
(A) Quantity I > Quantity II  
(B) Quantity I < Quantity II  
(C) Quantity I ≥ Quantity II  
(D) Quantity I ≤ Quantity II  
(E) Quantity I = Quantity II or no relation
17. A man deposited ₹x at S.I. in the beginning of 1st year and he added ₹x at the beginning of 2nd and 3rd year in a bank. After 3 years he got total amount ₹11160. If the rate of interest is 12% per annum. Find the value of x.  
(A) ₹1700 (B) ₹3000  
(C) ₹3200 (D) ₹2500  
(E) None of these
18. If sum of investment of A in both schemes and total profit obtained by A from both scheme is invested at compound Interest at the rate of 20% p.a. then find the total compound interest obtained in 2 yr  
(A) 108240 (B) 104206  
(C) 105208 (D) 109280  
(E) 106220
19. If A had invested his sum at Simple Interest for 3 yr at the rate of R% p.a. instead in scheme S<sub>1</sub> and B has invested his sum at compound Interest at (R + 5%) p.a. for 1 year and difference in interest obtained is 30,000 then find value of R%.

- (A) 10%                      (B) 9%  
(C) 15%                      (D) 18%  
(E) 12%

20. The simple interest earned on ₹14,400 in 5 years is ₹3,600 when invested at some rate of interest. What will be the compound interest earned on ₹14,000 when invested for 2 years at a rate double than in case of simple interest?
- (A) ₹2940                      (B) ₹3210  
(C) ₹2820                      (D) ₹3220  
(E) ₹3050