

## COMPOUND INTEREST

- 1) A sum of money at compound interest amounts to thrice itself in 3 years. In how many years will it be 9 times itself.  
a) 12 years b) 13 years c) 9 years d) 6 years
- 2) The population of a city increases at the rate of 4% p.a. but there is an additional annual increase of 1% in the population due to some job seekers. The percentage increase in the population after 2 years is  
a) 10 b) 11 c) 10.25 d) 10.50
- 3) The compound interest on a certain sum for 2 years is Rs.41` and the simple interest is R.40. What is the rate per annum?  
a) 4% b) 5% c) 6% d) 8%
- 4) The compound interest on Rs.P at R% p.a. for T years  
a)  $Rs P \left[ \left( 1 + \frac{R}{100} \right)^T - 1 \right]$   
b)  $Rs P \left[ \left( 1 + \frac{R}{100} \right)^T + 1 \right]$   
c)  $Rs P \left[ \left( 1 + \frac{R}{100} \right)^T - T \right]$   
d)  $Rs P \left[ \left( 1 + \frac{R}{100} \right)^T - P \right]$
- 5) What is the compound interest on Rs.5000 for 4 years if the rate of interest is 10% p.a. for the first 2 yrs and 20% for the next two years.  
a) Rs.2320.50 b) 3712 b) Rs.3745 d) None of the above
- 6) The compound interest on Rs.4000 for 1 year at 5% pa.a. payable half-yearly is  
a) Rs.101.25 b) Rs.20250 c) Rs.303.25 d) Rs.606.50
- 7) If population increases at 4% p.a. what will be the population of a city 2 years hence if it is 812500 now?  
a) 887800 b) 880000 c) 878800 d) 867800
- 8) A money lender lends out part of Rs.3364 at 5% compound interest for 3 years and the rest also at 5% compound interest, but for 5 years. If the final amount in both the cases is the same, what was the amount lent out for 5 years?  
a) Rs.2000 b) Rs.1760 c) Rs.1600 d) Rs.1000
- 9) The difference between the simple and compound interests on a certain sum for 2 years at 5% pa.a. is Rs.100. What is the sum?  
a) Rs.5000 b) Rs.4000 c) Rs.10,000 d) Rs.40,000

10) The compound interest on a certain sum at 5% p.a. for 2 years is Rs.102.50. What is the compound interest at 4% ?

a)Rs.80 b) Rs.81.60 c) Rs.82.60 d) Rs.79.60

11) If a sum of money amounts to Rs.28800 in 2 years and to Rs.376000 in 4 years then what is the rate of interest?

a) 25% b) 28% c) 22% d) 20%

12) The difference between simple interest and compound interest on a certain sum for 2 year at 5% is rupees 15. The principal is

a)4000 b) 5000 c) 6000 d) 7000

13) A sum amounts to Rs.1344 in two years at simple interest . What will be compound interest on the same sum at the same rate of interest for the same period?

a) Rs.150 b) Rs.140 c) Rs.130 d) Data insufficient for the answer

14) At the end of three years what will approximately be the compound interest at the rate of 10% p.a.on an amount of Rs.20,000 ?

a) Rs.6620 b) Rs.6500 c) Rs.6800 d) R.6400

15) The difference between the compound interest and simple interest on a certain sum at 6.25% p.a. for 2 years is Rs.70.31 . What is the sum?

a) Rs.18000 approx. b) Rs.16000 approx. c) Rs.14000 approx. d) Rs.12000 approx.

16) If a sum amounts to Rs.960 in two years at simple interest what will be the compound interest on the same amount in the same period at the same rate of interest?

a) Rs.178 b) Rs.168 c) Rs.158 d) Rs.148

17) If the amounts for a fixed principal after 3 and 2 years at a certain rate of compound interest are in the ratio of 21:20, then the rate of interest is

a) 7% b) 6% c) 5% d) 4%

18) The compound interest on Rs.15000 at 8% p.a. for 1 years compounded half – yearly is

a) Rs.1200 b) Rs.1224 c) Rs.1432 d) Rs.1500

19) The difference between simple and compound interest on a sum of money at 5% per annum for 2 years is Rs.25. The sum is

a) Rs.11000 b) Rs.1224 c) Rs.1432 b) Rs.1500

20) A sum of money amounts to Rs.14,520 in 2 year and to Rs.15,972 in 3 years reckoning compound interest at the rate of

a) 5% b) 10% c) 15% d) 20%

21) A sum of money four folds itself in 24 years on compound interest. With the same rate per cent the amount triples itself in

a) 12 years b) 15 years c) 16 years d) 18 years

22) A sum of money doubles in 10 years. A compound interest is charged on it at  $x\%$  p.a. With the same rate p.a. it will triple itself in

a) 5 years b) 10 years c) 154 years d) None of the above

23) What will be the compound interest accrued on a sum of Rs.50,000 for two years at the rate of 8 per cent per annum?

a) Rs.8520 b) Rs.8000 c) Rs.8320 d) None of the above

24) The difference between the compound interest and simple interest earned on a sum of Rs.50,000 in the second year at the rate of 4% p.a. is ?

a) Rs.60 b) Rs.100 c) Rs.120 d) None of the above

25) Rajan borrowed Rs.4000 at 5% compound interest. After 2 years, the balance with interest he repaid Rs.2210 and 2 years more years, the balance with interest. What was the total amount that he paid as interest?

a) Rs.635.50 b) 613.50 c) Rs.675.50 d) Rs.653.50

26) What sum of money will amount to Rs.9261 in  $1\frac{1}{2}$  years at 10% per annum, interest being compounded semi-annually?

a) Rs.7500 b) Rs.8000 c) Rs.8400 d) Rs.8500

27) Find the C.I. on a sum of Rs.1600 for 9 months at 20% per annum, interest being compounded quarterly.

a) Rs.17684 b) Rs.1684 c) Rs.2522 d) Rs.3408

28) At what rate per cent per annum will a sum of Rs.6250 amount to Rs.7840 in 2 years, interest being compounded annually?

a) 9% b) 10% c) 11% d) 12%

29) The difference between compound interest (compounded annually) and simple interest on a certain sum of money at 15% per annum in 2 years is Rs.225. Find the sum.

a) Rs.12000 b) Rs.11000 c) Rs.10000 d) Rs.15000

30) A sum of money amounts to Rs.8464 in two years at compound interest, interest being compounded annually. Find the rate of interest.

a) 12% p.a. b) 13% p.a. c) 14 % d) 15%

31) A sum of Rs.8600 is to be paid back in two equal annual instalments. What is the annual instalment, if the rate of interest is 15% per annum, compounded annually?

a) Rs.4300 b)Rs. 5290 c) Rs.4600 d) Rs.4650

32) Indu gave Bindu Rs.1250 on compound interest for 2 yrs at 4% per annum. How much less should Indu have got had she given it to Bindu for 2 years at 4% per annum S.I.?

a) Rs.10 b) Rs.2 c) Rs.5 d) None of the above

33) The C.I. on a certain sum of money for 2 years at 5% per annum compounded annually is Rs.328. What is the S.I. ?

a) Rs.300 b) Rs.314 c) Rs.320 d) None of the above

34) If the difference between S.I. and C.I. (Compounded annually) on a certain sum for 2 years at 4% per annum is Re.1, find the sum.

a) Rs.600 b) Rs.500 c) Rs.625 d) None of the above

35) In what time will a sum of Rs.8000 amount to Rs.9261 at 20% per annum, interest being compounded quarterly?

a) 1 year b) 6 months c) 9 months d) 8 months

36) Rakesh borrowed some money from a money-lender and returned in 2 equal annual instalments of Rs.1682 each. What sum did he borrow, if the rate of interest was 16% per annum, compounded annually?

a) Rs.2400 b) Rs.2450 c) Rs.2500 d) Rs.2700

37) A sum of money amounts to Rs.5290 in 2 years and Rs.6083.50 in three years at compounded interest, interest being compounded annually. Find the rate.

a) 12% b) 15% c) 16% d) 18%

38) The difference between the compound interest compounded annually and simple interest for 2 years at 20% per annum is Rs.144. Find the sum

a) Rs.3000 b) Rs.3300 c) Rs.3600 d) Rs.3900

39) The population of a town increases by 5% of what it had been at the beginning of each year. If the population in 1989 had been 441000, find its population in 1987.

a) 430000 b) 410000 c) 400000 d) 406000

40) At what rate % of C.I. will Rs.1600 amount to Rs.1764 in 2 years, interest being compounded annually?

a) 5 b) 4 c) 6 d) None of the above

41) What sum of money put at C.I. amounts in 2 years to Rs.8820 and in 3 years to Rs.9261 ?

a) Rs.8000 b) Rs.8400 c) Rs.7500 d) None of the above

42) In what time will Rs.8000 amount to Rs.9261 at 5% p.a. compound interest?

a) 2 years b) 3 years c) 4 years d) None of the above

43) At what rate % p.a. will a certain sum of money amount to Rs.8400 in one year and to Rs.8820 in two years, reckoning C.I.?

a) 8 b) 5 c) 6 d) None of the above

44) Simple interest on a sum of money for 2 years is Rs.160 and C.I. is Rs.170, the rate being the same in either case. Find the rate

a) 8% b) 10% c)  $12\frac{1}{2}\%$  d) None of the above

45) From the data in Q.44 above, find the sum.

a) Rs.800 b) Rs.640 c) Rs.1000 d) None of the above

46) An amount deposited on compound interest becomes Rs.5700 after three years and Rs.600 after four years. After 5 years this amount will become Rs.

a) 6303 b) 6316 c) 6387 d) 6408

47) A sum of money at compound interest becomes Rs.3132.40 in three years and Rs.3524.0 in four years. The rate per cent is  
a) 8.25 b) 9.5 c) 12.5 d) 10.0

48) What is the compound interest on Rs.5400 compounded quarterly at 20% per annum for 18 months?  
a) Rs.1488 b) Rs.1620 c) Rs.1836.50 d) None of the above

49) At the end of three years, what will approximately be the compound interest on Rs.10,105 at the rate of 10% per annum?  
a) Rs.4500 b) Rs.3000 c) Rs.3300 d) Rs.3600

50) What will be the sum if the difference between compound interest and simple interest for 2 years at % is Rs.5 ?  
a) Rs.4000 b) Rs.3500 c) Rs.2000 d) Rs.2500

Ans:

1d	6b	11c	16b	21d	26b	31b	36d	41a	46b
2c	7c	12c	17c	22c	27c	32b	37b	42b	47c
3b	8c	13d	18b	23c	28d	33c	38c	43b	48c
4a	9d	14a	19b	24d	29c	34c	39c	44c	49c
5b	10b	15a	20b	25a	30d	35c	40a	45b	50c