Practice Exercise

Level - I

1. To buy furniture for a new apartment, Sylvia Chang borrowed ₹ 5000 at 11% per annum simple interest for 11 months. How much interest will she pay?
(a) 500 (b) 504.17
(c) 6050 (d) 605

2. Find the compound interest on ₹ 18,750 in 2 years the rate of interest being 4% for the first year and 8% for the second year.
(a) 2310 (b) 1130
(c) 3120 (d) None of these

3. At a simple interest ₹ 800 becomes ₹ 956 in three years. If the interest rate, is increased by 3%, how much would ₹ 800 become in three years?
(a) ₹ 1020.80 (b) ₹ 1004
(c) ₹ 1028 (d) Data inadequate

4. On retirement, a person gets 1.53 lakhs of his provident fund which he invests in a scheme at 20% p.a. His monthly income from this scheme will be
(a) ₹ 2, 450 (b) ₹ 2,500
(c) ₹ 2, 550 (d) ₹ 2, 600

5. In how many minimum number of complete years, the interest on ₹ 212.50 P at 3% per annum will be in exact number of rupees?
(a) 6 (b) 8
(c) 9 (d) 7

6. A scooter costs ₹ 25, 000 when it is brand new. At the end of each year, its value is only 80% of what it was at the beginning of the year. What is the value of the scooter at the end of 3 years?
(a) ₹ 10,000 (b) ₹ 12,500
(c) ₹ 12,800 (d) ₹ 12,000

7. Village A has a population of 6800, which is decreasing at the rate of 120 per year. Village B has a population of 4200, which is increasing at the rate of 80 per year. In how many years will the population of the two villages will become equal ?
(a) 9 (b) 11
(c) 13 (d) 16

8. A person invested some amount at the rate of 12% simple interest and a certain amount at the rate of 10% simple interest. He received yearly interest of ₹ 130. But if he had interchanged the amounts invested, he would have received ₹ 4 more as interest. How much did he invest at 12% simple interest ?
(a) ₹ 700 (b) ₹ 500
(c) ₹ 800 (d) ₹ 400

9. A certain amount is lent at x% p.a. simple interest for two years. Instead, if the amount was lent at $2x$% p.a. simple interest for 'y' more years, then the interest would have been five times the earlier interest. What is the value of y?
(a) 2 years (b) 3 years
(c) 4 years (d) 5 years

10. A certain sum of money triple itself in 8 years. In how many years it will be five times?
(a) 22 years (b) 16 years
(c) 20 years (d) 24 years

11. The difference between CI and SI on a certain sum of money at 10% per annum for 3 years is ₹ 620. Find the principal if it is known that the interest is compounded annually.
(a) ₹ 200, 000 (b) ₹ 20,000
(c) ₹ 10,000 (d) ₹ 100, 000

12. An amount of ₹ 12820 due 3 years hence, is fully repaid in three annual instalments starting after 1 year The first instalment is 1/2 the second instalment and the second instalment is 2/3 of the third instalment. If the rate of interest is 10% per annum, find the first instalment.
(a) ₹ 2400 (b) ₹ 1800
(c) ₹ 2000 (d) ₹ 2500

13. What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?
(a) 1 : 3 (b) 1 : 4
(c) 2 : 3 (d) None of these

14. A man borrows ₹ 6000 at 5% interest, on reducing balance, at the start of the year. If he repays ₹ 1200 at the end of each year, find the amount of loan outstanding, (in ₹), at the beginning of the third year.
(a) 3162.75 (b) 4155.00
(c) 4155.00 (d) 5100.00

15. Two equal sums were lent, one at the rate of 11% p.a. for five years and the other at the rate of 8% p.a. for six years, both under simple interest. If the difference in interest accrued in the two cases is ₹ 1008. find the sum.
(a) ₹ 11,200 (b) ₹ 5,600
(c) ₹ 12,600 (d) ₹ 14,400

16. A sum is invested at compound interest payable annually. The interest in two successive years was ₹ 225 and ₹ 236.25. Find the rate of interest
(a) 2% (b) 3%
(c) 5% (d) 9%

17. A person borrowed ₹ 500 at 3% per annum S.I. and ₹ 600 at $4\frac{1}{2}$% per annum on the agreement that the whole sum, will be returned only when the total interest becomes ₹ 126. The number of years, after which the borrowed sum is to be returned, is :

(a) 2 (b) 3
(c) 4 (d) 5

18. A bank offers 5% compound interest calculated on half-yearly basis. A customer deposits ₹ 1600 each on 1st January and 1st July of a year. At the end of the year, the amount he would have gained by way of interest is

(a) ₹ 120 (b) ₹ 121
(c) ₹ 122 (d) ₹ 123

19. A sum of money invested at simple interest triples itself in 8 years. How many times will it become in 20 years time?

(a) 8 times (b) 7 times
(c) 6 times (d) 9 times

20. The population of a city is 200,000. If the annual birth rate and the annual death rate are 6% and 3% respectively, then calculate the population of the city after 2 years.

(a) 212,090 (b) 206,090
(c) 212,000 (d) 212,180

21. The population of Bangalore was 1283575 on 1 January 2001 and the growth rate of population was 10% in the last year and 5% in the years prior to it, the only exception being 1999 when because of a huge exodus there was a decline of 20% in population. What was the population of January 1, 1995 ?

(a) 1,000,000 (b) 1,200,000
(c) 1,250,000 (d) 1,500,000

22. A person bought a motorbike under the following scheme: Down payment of ₹ 15,000 and the rest amount at 8% per annum for 2 years. In this way, he paid ₹ 28,920 in total. Find the actual price of the motorbike. (Assume simple interest).

(a) ₹ 26,000 (b) ₹ 27,000
(c) ₹ 27,200 (d) ₹ 26,500

23. The ratio of the amount for two years under C.I. annually and for one year under S.I. is 6 : 5. When the rate of interest is same, then the value of rate of interest is

(a) 12.5% (b) 18%
(c) 20% (d) 16.66%

24. Mr. Bajaj invested $\frac{1}{7}$ of his total investment at 4% and $\frac{1}{2}$ at 5% and rest at 6% for the one year and received total interest of ₹ 730. What is the total sum invested?

(a) ₹ 70000 (b) ₹ 14000
(c) ₹ 24000 (d) ₹ 38000

25. Akram Ali left an amount of ₹ 340000 to be divided between his two sons aged 10 years and 12 years such that both of them would get an equal amount when each attain 18 years age. What is the share of elder brother if the whole amount was invested at 10% simple interest ?

(a) 120000 (b) 140000
(c) 160000 (d) 180000

26. A Sonata watch is sold for ₹ 440 cash or for ₹ 200 cash down payment together with ₹ 244 to be paid after one month. Find the rate of interest charged in the instalment scheme

(a) 10% (b) 15%
(c) 20% (d) 25%

27. What will be the compound interest on a sum of ₹ 7500/- at 4 p.c.p.a. in 2 years ? [*SBI Clerk-June-2012*]

(a) ₹ 618/- (b) ₹ 612/-
(c) ₹ 624/- (d) ₹ 606/-
(e) ₹ 621/-

28. In how many years will ₹ 4600 amount to ₹ 5428 at 3 p.c.p.a. simple interest ? [*SBI Clerk-June-2012*]

(a) 3 (b) 5
(c) 6 (d) 4
(e) None of these

29. A sum of money becomes eight times in 3 years if the rate is compounded annually. In how much time, the same amount at the same compound interest rate will become sixteen times ? [*SBI Clerk-2014*]

(a) 6 years (b) 4 years
(c) 8 years (d) 5 years
(e) None of these

30. If the compound interest on a certain sum of money for 3 years at 10% p.a. be ₹ 993, what would be the simple interest ? [*SBI Clerk-2014*]

(a) ₹ 800 (b) ₹ 950
(c) ₹ 900 (d) ₹ 1000
(e) None of these

31. Mahesh starts work as a sales representative on an annual salary of ₹ 1,60,000. If he receives a 15% pay-rise each year, the number of years he has worked for the company, when his annual salary became ₹ 2,79,841 is [*SSC-Sub. Ins.-2012*]

(a) 2 (b) 3
(c) 4 (d) 5

32. A sum of money placed at compound interest doubles itself in 5 years. It will amount to eight times of itself in : [*SSC-Sub. Ins.-2013*]

(a) 15 years (b) 12 years
(c) 10 years (d) 20 years

33. A sum amounts double in 8 years by simple interest. Then the rate of simple interest p.a. is [*SSC-Sub. Ins.-2014*]

(a) 10% (b) 12.5%
(c) 15% (d) 20%

34. Rekha invested a sum of ₹ 12000 at 5% per annum compound interest. She received an amount of ₹ 13230 after n years. Find n. [*SSC-Sub. Ins.-2014*]

(a) 2.8 years (b) 3.0 years
(c) 2.5 years (d) 2.0 years

35. A sum of money becomes 1.331 times in 3 years as compound interest. The rate of interest is [*SSC-MT-2013*]

(a) 50% (b) 8%
(c) 7.5% (d) 10%

36. A person deposited ₹ 500 for 4 years and ₹ 600 for 3 years at the same rate of simple interest in a bank. Altogether he received ₹ 190 as interest. The rate of simple interest per annum was [*SSC-MT-2013*]

(a) 3% (b) 4%
(c) 5% (d) 2%

37. The difference between the interests received from two different banks on ₹ 500 for 2 years is ₹ 2.50. The difference between their rates is: [*SSC 10+2-2012*]

(a) 0.5% (b) 2.5%
(c) 0.25% (d) 1%

38. A principal of ₹ 10,000, after 2 years compounded annually, the rate of interest being 10% per annum during the first year and 12% per annum during the second year (in rupees) will amount to: [*SSC 10+2-2012*]

(a) 12,000 (b) 12,320
(c) 12,500 (d) 11,320

39. A sum becomes ₹ 2,916 in 2 years at 8% per annum compound interest. The simple interest at 9% per annum for 3 years on the same amount will be [*SSC 10+2-2013*]

(a) ₹ 625 (b) ₹ 600
(c) ₹ 675 (d) ₹ 650

40. The population of a village increases by 5% annually. If its present population is 4410, then its population 2 years ago was [*SSC 10+2-2014*]

(a) 4500 (b) 4000
(c) 3800 (d) 3500

41. A sum of ₹ 210 was taken as a loan. This is to be paid back in two equal instalments. If the rate of interest be 10% compounded annually, then the value of each instalment is [*SSC 10+2-2014*]

(a) ₹ 127 (b) ₹ 121
(c) ₹ 210 (d) ₹ 225

42. ₹ 64,000 will amount to ₹ 68,921 at 5% per annum and interest payable half yearly in [*SSC 10+2-2014*]

(a) $3\frac{1}{2}$ years (b) 2 years
(c) $2\frac{1}{2}$ years (d) $1\frac{1}{2}$ years

43. If the simple interest and compound interest at the same rate of certain amount for 2 years are ₹ 400 & ₹ 420 respectively, then the rate of interest is [*SSC 10+2-2014*]

(a) 12% (b) 8%
(c) 10% (d) 11%

44. What would be the compound interest obtained on an amount of ₹ 1,210 at the rate of 6. p.c.p.a. after a year ? [*IBPS Clerk-2012*]

(a) ₹ 70.50 (b) ₹ 74.60
(c) ₹ 73.80 (d) ₹ 72.60
(e) None of these

45. What is the difference between the simple and compound interest earned from a sum of ₹ 13,033 at a rate of 13 percent per annum for a period of 3 years (rounded off to 2 digits after decimal) ? [*IBPS Clerk-2012*]

(a) ₹ 5,082.87 (b) ₹ 689.41
(c) ₹ 5,772.28 (d) ₹ 680.94
(e) None of these

46. ₹ 58,750 amounts to ₹ 79,900 in four years at simple interest. What is the rate of interest paid? [*IBPS Clerk-2012*]

(a) 14 (b) 13
(c) 12 (d) 16
(e) 9

47. How much will a sum of ₹ 12,000 deposited at a rate of 9% per annum (simple interest) for 13 years amount to? [*IBPS Clerk-2012*]

(a) ₹ 14,040 (b) ₹ 20,650
(c) ₹ 13,404 (d) ₹ 27,800
(e) ₹ 26,040

48. Simple interest on a sum of money for 4 yrs at 7 pcpa is ₹ 3584. What would be the compound interest (compounded annually) on the same amount of money for 2 yr at 4 pcpa? [*IBPS Clerk-2013*]

(a) ₹ 1162.32 (b) ₹ 1098.72
(c) ₹ 992.38 (d) ₹ 1231.76
(e) ₹ 1044.48

Level - II

1. The comound interest on a certain sum for 2 years at 10% per annum is ₹ 1260. The simple interest on the same sum for double the time at half the rate per cent per annum is

(a) ₹ 1200 (b) ₹ 1160
(c) ₹ 1208 (d) ₹ 1175

2. The simple interest on a sum of money will be ₹ 300 after 5 years. In the next 5 years principal is trepled, what will be the total interest at the end of the 10th year?

(a) 1200 (b) 900
(c) 600 (d) 1500

3. A person lent a certain sum of money at 4% simple interest; and in 8 years the interest amounted to ₹ 340 less than the sum lent. Find the sum lent.

(a) 500 (b) 600
(c) 1000 (d) 1500

4. A sum was put at simple interest at a certain rate for 2 years. Had it been put at 1% higher rate, it would have fetched ₹ 24 more? The sum is

(a) 1200 (b) 1500
(c) 1800 (d) 2000

5. A sum of money at compound interest amounts in two years to ₹ 2809, and in three years to ₹ 2977.54. Find the rate of interest and the original sum
(a) 2000 (b) 2100
(c) 2200 (d) 2500

6. Consider the following statements
If a sum of money is lent at simple interest, then the
I. money gets doubled in 5 years if the rate of interest is $16\frac{2}{3}\%$.
II. money gets doubled in 5 years if the rate of interest is 20%.
III. money becomes four times in 10 years if it gets doubled in 5 years.
Of these statements,
(a) I and III are correct (b) II alone is correct
(c) III alone is correct (d) II and III are correct

7. Simple interest on a certain amount is $\frac{9}{16}$ of the principal.
If the numbers representing the rate of interest in percent and time in years be equal, then time, for which the principal is lent out, is
(a) $5\frac{1}{2}$ years (b) $6\frac{1}{2}$ years
(c) 7 years (d) $7\frac{1}{2}$ years

8. If the rate increases by 2%, the simple interest received on a sum of money increases by ₹ 108. If the time period is increased by 2 years, the simple interest on the same sum increases by ₹ 180. The sum is :
(a) ₹ 1800 (b) ₹ 3600
(c) ₹ 5400 (d) Data inadequate

9. A man lends ₹ 10,000 in four parts. If he gets 8% on ₹ 2000; $7\frac{1}{2}\%$ on ₹ 4000 and $8\frac{1}{2}\%$ on ₹ 1400; what percent must he get for the remainder, if his average annual interest is 8.13% ?
(a) 7% (b) 9%
(c) $9\frac{1}{4}\%$ (d) $10\frac{1}{2}\%$

10. A man borrows ₹ 12,500 at 20% compound interest. At the end of every year he pays ₹ 2000 as part repayment. How much does he still owe after three such instalments?
(a) ₹ 12,000 (b) ₹ 12,864
(c) ₹ 15,600 (d) None of these

11. A part of ₹ 38,800 is lent out at 6% per six months. The rest of the amount is lent out at 5% per annum after one year. The ratio of interest after 3 years from the time when first amount was lent out is 5 : 4. Find the second part that was lent out at 5%
(a) ₹ 26, 600 (b) ₹ 28,800
(c) ₹ 27,500 (d) ₹ 28,000

12. The difference between C.I. and S.I. on a certain sum of money at 10% per annum for 3 years is ₹ 620. Find the principal if it is known that the interest is compounded annually.
(a) ₹ 200,000 (b) ₹ 20,000
(c) ₹ 10,000 (d) ₹ 100,000

13. The population of towns *A* and *B* is the ratio of 1 : 4. For the next 2 years, the population of A would increase and that of *B* would decrease by the same percentage every year. After 2 years, their population became equal. What is the percentage change in the population?
(a) 33.33% (b) 66.66%
(c) 25% (d) Not possible

14. If the population of a town at the beginning of a year was 1530000, and the birth rate was 53.2, while the death rate was 31.2 per 1000 of the population, then the net increase in the population at the end of the year was
(a) 336600 (b) 363600
(c) 366300 (d) 330000

15. Arun borrowed a sum of money from Jayant at the rate of 8% per annum simple interest for the first four years, 10% per annum for the next six years and 12% per annum for the period beyond ten years. If he pays a total of ₹ 12,160 as interest only at the end of 15 years, how much money did he borrow?
(a) ₹ 8000 (b) ₹ 10,000
(c) ₹ 12,000 (d) ₹ 9,000

16. What will be the difference in simple and compound interest on ₹ 2000 after three years at the rate of 10 percent per annum?
(a) ₹ 160 (b) ₹ 42
(c) ₹ 62 (d) ₹ 20

17. Aniket deposited two parts of a sum of ₹ 25000 in different banks at the rates of 15% per annum and 18% per annum respectively. In one year he got ₹ 4050 as the total interest. What was the amount deposited at the rate of 18% per annum?
(a) ₹ 9000 (b) ₹ 18000
(c) ₹ 15000 (d) None of these

18. Mr. *X* invested an amount for 2 years at 15 percent per annum at simple interest. Had the interest been compounded, he would have earned ₹ 450/- more as interest. What was the amount invested?
(a) ₹ 22000 (b) ₹ 24000
(c) ₹ 25000 (d) None of these

19. Mr Sridharan invested money in two schemes *A* and *B*, offering compound interest at 8 percent per annum and 9 percent per annum respectively. If the total amount of interest accrued through the two schemes together in two years was ₹ 4818.30 and the total amount invested was ₹ 27,000, what was the amount invested in Scheme *A* ?
(a) ₹ 15,000 (b) ₹ 13,500
(c) ₹ 12,000 (d) Cannot be determined

20. Parameshwaran invested an amount of ₹ 12,000 at the simple interest rate of 10 percent per annum and another amount at the simple interest rate of 20 percent per annum. The total interest earned at the end of one year on the total amount invested became 14 percent per annum. Find the total amount invested.
(a) ₹ 22,000 (b) ₹ 25,000
(c) ₹ 20,000 (d) ₹ 24,000

21. A father left a will of ₹ 68,000 to be divided between his two sons aged 10 years and 12 years such that they may get equal amount when each attains the age of 18 years If the money is reckoned at 10% p.a., find how much each gets at the time of the will.
(a) ₹ 30,000, ₹ 38,000 (b) ₹ 28,000, ₹ 40,000
(c) ₹ 32,000, ₹ 36,000 (d) Cannot be determined

22. Two equal sums of money were invested, one at 4% and the other at 4.5%. At the end of 7 years, the simple interest received from the latter exceeded to that received from the former by ₹ 31.50. Each sum was
(a) ₹ 1,200 (b) ₹ 600
(c) ₹ 750 (d) ₹ 900

23. A sum of ₹ 725 is lent in the beginning of a year at a certain rate of interest. After 8 months, a sum of ₹ 362.50 more is lent but at the rate twice the former. At the end of the year, ₹ 33.50 is earned as interest from both the loans. What was the original rate of interest?
(a) 3.6% (b) 4.5%
(c) 5% (d) 3.46%

24. David invested certain amount in three different schemes *A*, *B* and *C* with the rate of interest 10% p.a., 12% p.a. and 15% p.a. respectively. If the the total interest accrued in one year was ₹ 3200 and the amount invested in Scheme *C* was 150 % of the amount invested in Scheme *A* and 240% of the amount invested in Scheme *B*, what was the amount invested in Scheme *B*?
(a) ₹ 5000 (b) ₹ 6500
(c) ₹ 8000 (d) cannot be determined

25. Subash purchased a refrigerator on the terms that he is required to pay ₹ 1,500 cash down payment followed by ₹ 1,020 at the end of first year, ₹ 1,003 at the end of second year and ₹ 990 at the end of third year. Interest is charged at the rate of 10% per annum. Calculate the cash price
(a) ₹ 3,000 (b) ₹ 2,000
(c) ₹ 4,000 (d) ₹ 5,000

26. A owes *B* ₹ 1,573, payable $1\frac{1}{2}$ years hence. Also *B* owes *A* ₹ 1,444.50, payable 6 months hence. If they want to settle the account forthwith, keeping 14% as the rate of interest, then who should pay whom and how much ?
(a) *A* to *B*, ₹ 28.50 (b) *B* to *A*, ₹ 37.50
(c) *A* to *B*, ₹ 50 (d) *B* to *A*, ₹ 50

27. Seema invested an amount of ₹ 16,000 for two years on compound interest and received an amount of ₹ 17,640 on maturity. What is the rate of interest ?
(a) 5% pa (b) 8% pa
(c) 4% pa (d) Data inadequate

28. A finance company declares that, at a certain compound interest rate, a sum of money deposited by anyone will become 8 times in three years. If the same amount is deposited at the same compound rate of interest, then in how many year will it become 16 times ?
(a) 5 years (b) 4 years
(c) 6 years (d) 7 years

29. Two friends *A* and *B* jointly lent out ₹ 81,600 at 4% per annum compound interest. After 2 years *A* gets the same amount as *B* gets after 3 years. The investment made by *B* was
(a) ₹ 40,000 (b) ₹ 30,000
(c) ₹ 45,000 (d) ₹ 38,000

30. A money-lender, lends a part of his money at 10% per annum and the rest at 15% per annum. His annual income is ₹ 1900. However, if he had interchanged the rate of interest on the two sums, he would have earned ₹ 200 more. The amount lent will fetch what 15%?
(a) ₹ 6000 (b) ₹ 4000
(c) ₹ 10000 (d) ₹ 4400

31. The simple interest on a sum of money is $\frac{1}{9}$th of the principal, and the number of years is equal to the rate per cent per annum. Find the rate per cent.
(a) $3\frac{1}{3}\%$ (b) 3%
(c) 10% (d) None of these

32. Amin borrowed some money from Vishwas. The rate of interest for first two years is 8% p.a., for the next three years is 11 % p.a. and for the period beyond 5 years 14% p.a. Vishwas got an amount of ₹ 10920 as an interest at the end of eight years. Then what amount was borrowed by Amin'?
(a) ₹ 12000 (b) ₹ 15000
(c) ₹ 1400 (d) None of these

33. The simple interest accrued on an amount of ₹ 22,500 at the end of four years is ₹ 10,800. What would be the compound interest accrued on the same amount at the same rate at the end of two years ? *[IBPS-PO-2011]*
(a) ₹ 16,908 (b) ₹ 5,724
(c) ₹ 28,224 (d) ₹ 8,586
(e) None of these

34. What is the difference between the simple and compound interest on ₹ 7,300/- at the rate of 6 p.c.p.a. in 2 years ? *[IBPS-PO-2012]*
(a) ₹ 29.37/- (b) ₹ 26.28/-
(c) ₹ 31.41/- (d) ₹ 23.22/-
(e) ₹ 21.34/-

35. The simple interest accrued on a sum of certain principal in 8 yr at the rate of 13% per year is ₹ 6500. What would be the compound interest accrued on that principal at the rate of 8% per year in 2 yrs? *[IBPS-PO-2013]*
(a) ₹ 1040 (b) ₹ 1020
(c) ₹ 1060 (d) ₹ 1200
(e) None of these

36. The difference between C. I. (Compound Interest) and S.I. (Simple Interest) on a sum of ₹ 4,000 for 2 years at 5% p.a. payable yearly is *[SSC CGL-2012]*
(a) ₹ 20 (b) ₹ 10
(c) ₹ 50 (d) ₹ 60

37. Two equal sums were borrowed at 8% simple interest per annum for 2 years and 3 years respectively. The difference in the interest was ₹ 56. The sums borrowed were *[SSC CGL-2013]*
(a) ₹ 800 (b) ₹ 700
(c) ₹ 560 (d) ₹ 350