

EXERCISE – 4.1

MULTIPLE CHOICE QUESTION

Select the correct option out of the given ones :

To Find Simple Interest

- The simple interest on Rs. 5,500 for 5 years at 11 per cent per annum is :
(A) 3015 (B) 3025 (C) 3045 (D) 3075
- How much interest will be earned on Rs. 2000 at 6% simple interest for 2 years ?
(A) Rs. 240 (B) Rs. 250 (C) Rs. 260 (D) Rs. 280
- 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.
- Sania deposited Rs. 50000 in a bank for two years with the interest rate of 5.5% p.a. How much interest would she earn ?
(A) Rs. 5500 (B) Rs. 6500 (C) Rs. 4500 (D) Rs. 4800
- If $P = 5000$; $R = 15$; $T = 4.5$ years using $I = \frac{PRT}{100}$, then I will be :
(A) Rs. 3375 (B) Rs. 3300 (C) Rs. 3735 (D) None of these.
- A person borrows Rs. 5000 for 2 years at 4% p.a. simple interest. He immediately lends it to another person at $6\frac{1}{4}\%$ p.a. for 2 years. Find his gain in the transaction per year.
(A) Rs. 112.50 (B) Rs. 125 (C) Rs. 150 (D) Rs. 167.50
- S.I. on Rs. 3500 for 3 years at 12% per annum is :
(A) Rs. 1200 (B) 1260 (C) 2260 (D) None of these.

8. Arun and Ramu are friends. Arun borrowed a sum of Rs. 400 at 5% per annum simple interest from Ramu. He returns the amount with interest after 2 years. Ramu returns to Arun 2% of the total amount returned. How much did Arun receive ?
 (A) Rs. 9.20 (B) Rs. 7.60 (C) Rs. 8.80 (D) None of these.
9. The principal that will yield Rs. 60 as simple interest at 6% per annum in 5 years is :
 (A) Rs. 175 (B) Rs. 350 (C) Rs. 200 (D) None of these.
10. The sum required to earn a monthly interest of Rs. 1200 at 18% per annum simple interest is :
 (A) Rs. 50000 (B) Rs. 60000 (C) Rs. 80000 (D) None of these.
11. A man took a loan from a bank at the rate of 12% p.a. simple interest. After 3 years he had to pay Rs. 5400 interest only for the period. The principal amount borrowed by him was :
 (A) Rs. 2000 (B) Rs. 10,000 (C) Rs. 15,000 (D) Rs. 20,000
12. Sachin deposited Rs. 100000 in his bank for 2 years at simple interest rate of 6%. How much would be the final value of deposit ?
 (A) Rs. 1,12,000 (B) Rs. 1,10,200 (C) Rs. 1,08,200 (D) Rs. 1,21,200
13. A sum was put at simple interest at a certain rate for 2 years. Had it been put at 3% higher rate, it would have fetched Rs. 72 more. The sum is :
 (A) Rs. 1200 (B) Rs. 1500 (C) Rs. 1600 (D) Rs. 1800
14. Two equal sums of money were lent at simple interest at 11% p.a. for $3\frac{1}{2}$ years and $4\frac{1}{2}$ years respectively. If the difference in interests for two periods was Rs. 412.50, then each sum is :
 (A) Rs. 3250 (B) Rs. 3500 (C) Rs. 3750 (D) Rs. 4250
15. Kapil deposited some amount in a bank for $7\frac{1}{2}$ years at the rate of 6% p.a. simple interest. Kapil received Rs. 101500 at the end of the term. The initial deposit of Kapil is :
 (A) Rs. 65,000 (B) Rs. 70,000 (C) Rs. 75,000 (D) 80,000
16. A money lender finds that due to a fall in the annual rate of interest from 8% to $7\frac{3}{4}$ % his yearly income diminishes by Rs. 61.50. His capital is :
 (A) Rs. 22,400 (B) Rs. 23,800 (C) Rs. 24,600 (D) Rs. 26,000
17. If a certain sum of money borrowed at 5% per annum simple interest amounts to Rs. 1020 in 4 years, then the sum of money borrowed is :
 (A) Rs. 850 (B) Rs. 925 (C) Rs. 750 (D) None of these.
18. The rates of simple interest in two banks A and B are in the ratio 5 : 4. A person wants to deposit his total savings in two banks in such a way that he received equal half-yearly interest from both. He should deposit the savings in bank A and B in the ratio :
 (A) 2 : 5 (B) 4 : 5 (C) 5 : 2 (D) 5 : 4
19. If the annual rate of simple interest increases from 10% to $12\frac{1}{2}$ %, a man's yearly income increases by Rs. 1250. His principal (in Rs.) is :
 (A) 45,000 (B) 50,000 (C) 60,000 (D) 65,000
20. Two equal sums of money were invested, one at 4% and the other at $4\frac{1}{2}$ %. At the end of 7 years the simple interest received from the latter exceeded that received from the former by Rs. 31.50. Each sum was :
 (A) Rs. 1,000 (B) Rs. 500 (C) Rs. 750 (D) Rs. 900

21. What sum will amount to Rs. 5,200 in 3 years at the same rate of simple interest at which Rs. 3,000 will amount to Rs. 4,800 in 6 years ?
 (A) Rs. 4000 (B) Rs. 4500 (C) Rs. 4800 (D) Rs. 4900
22. What sum of money will produce Rs. 28600 interest in 3 years and 3 months at 2.5% p.a. simple interest ?
 (A) Rs. 3,52,000 (B) Rs. 3,42,000 (C) Rs. 3,32,000 (D) Rs. 4,52,000
23. What sum of money will amount to Rs. 1380 in 3 years at 5% p.a. simple interest ?
 (A) Rs. 1000 (B) Rs. 1100 (C) Rs. 1200 (D) Rs. 1500.
24. A certain sum amounts to Rs. 2,300 in 3 years and Rs. 2,500 in 5 years at simple interest. Find the sum and the rate of interest.
 (A) Rs. 1200, 6% (B) Rs. 1800, 5% (C) Rs. 2000, 5% (D) Rs. 1500, 6%
25. Subbarao was approached by two neighbours for loan. He had Rs. 2540, a part of which he lent to one person at 12% interest per annum, and the other part was lent to the second person at 12.5%. At the end of a year, Subbarao received Rs. 311.60 as interest on the total loan. Calculate the amount of money lent by him at 12% interest.
 (A) Rs. 1360 (B) Rs. 1340 (C) Rs. 1240 (D) Rs. 1180
26. A man invests Rs. 3965 in the names of his three daughters Neeta, Sita and Gita in such a way that they get the same amount after 2, 3 and 4 years, respectively. If the rate of interest is 5% p.a., then the amount invested for Neeta, Sita and Gita is :
 (A) Rs. 1380, Rs. 1320, Rs. 1265 (B) Rs. 1330, Rs. 1360, Rs. 1380
 (C) Rs. 1380, Rs. 1220, Rs. 1265 (D) Rs. 1250, Rs. 1350, Rs. 1180
27. If the rate increases by 2%, the simple interest on a sum of money increases by Rs. 108. If the time period is increased by 2 years, the simple interest on the same sum increases by Rs. 180. The sum is :
 (A) Rs. 1800 (B) Rs. 3600 (C) Rs. 5400 (D) Data inadequate
28. A sum of Rs. 1550 was lent partly at 5% and partly at 8% p.a. simple interest. The total interest received after 3 years was Rs. 300. The ratio of the money lent at 5% to that lent at 8% is :
 (A) 5 : 8 (B) 8 : 5 (C) 16 : 15 (D) 31 : 6
29. An amount of Rs. 1,00,000 is invested in two types of shares. The first yields an interest of 9% p.a. and second, 11% p.a. If the total interest at the end of the one year is $9\frac{3}{4}\%$, then the amount invested in each share was
 (A) Rs. 52,500; Rs. 47,500 (B) Rs. 62,500; Rs. 37,500
 (C) Rs. 72,500; Rs. 27,500 (D) Rs. 82,500; Rs. 17,500
30. Some amount out of Rs. 7000 was lent at 6% per annum and the remaining was lent at 4% per annum. If the total simple interest from both the fractions in 5 years was Rs. 1,600, calculate the sum lent of 6% per annum.
 (A) Rs. 2000 (B) Rs. 3000 (C) Rs. 2500 (D) None of these
31. 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 total interest accrued in one year was Rs. 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) Rs. 5000 (B) Rs. 6500 (C) Rs. 8000 (D) None of these

32. At what rate per cent will a sum double itself in 20 years of simple interest ?
 (A) 6% (B) 5% (C) 7% (D) 8%
33. The rate per cent per annum at which Rs. 1200 amount to Rs. 1440 in 4 years, is :
 (A) 5% (B) 4% (C) 6% (D) None of these.
34. A sum of Rs. 46875 was lent out at simple interest and at the end of 1 year 8 months the total amount was Rs. 50000. Find the rate of interest per cent per annum.
 (A) 6% (B) 5% (C) 4% (D) 3%
35. Reena took a loan of Rs. 1200 with simple interest for as many years as the rate of interest. If she paid Rs. 432 as interest at the end of the loan period, what was the rate of interest ?
 (A) 3.6 (B) 6 (C) 18 (D) none of these.
36. If simple interest on a certain sum of money is Rs. 256 and the rate of interest per annum equals the number of years, then the rate of interest is :
 (A) 13% (B) 14% (C) 16% (D) None of these.
37. Find the rate of interest if the amount owed after 6 months is Rs. 1050, the borrowed amount being Rs. 1000.
 (A) 7% (B) 8% (C) 10% (D) 12%
38. A sum of Rs. 1600 gives a simple interest of Rs. 252 in 2 years and 4 months. The rate of interest per annum is :
 (A) 6% (B) 6.5% (C) 6.25% (D) 6.75%
39. If the simple interest on a certain sum of money after $6\frac{1}{4}$ years is $\frac{3}{8}$ of the principal, then the rate of interest per annum is :
 (A) 5% (B) 6% (C) 4% (D) None of these.
40. If $P = 5000$; $T = 1$ year ; $S.I. = Rs. 300$, R will be
 (A) 5% (B) 4% (C) 6% (D) None of these.
41. A sum of Rs. 12,500 amounts to Rs. 15,500 in 4 years at the rate of simple interest. What is the rate of interest ?
 (A) 3% (B) 4% (C) 5% (D) 6%
42. If $P = Rs. 12000$; $A = Rs. 16500$, $T = 2\frac{1}{2}$ years, then rate per cent per annum simple interest will be :
 (A) 15% (B) 12% (C) 10% (D) None of these.
43. At what rate per cent per annum will a sum of money double in 16 years ?
 (A) 6% (B) 6.5% (C) 6.25% (D) 5.25%
44. A sum of money amount to Rs. 6200 in 2 years and Rs. 7400 in 3 years. The principal and rate of interest are :
 (A) Rs.3800, 31.57% (B) Rs. 3000, 20% (C) Rs. 3500, 15% (D) None of these.
45. A certain sum of money amounts to Rs. 1008 in 2 years and to Rs. 1164 in 3.5 years. Find the sum and the rate of interest.
 (A) (Rs. 800, 13%) (B) (Rs. 800, 12%) (C) (Rs. 1008, 13%) (D) None of these.
46. If the simple interest on a certain sum of money is $\frac{4}{25}$ th of the sum and the rate per cent equals the number of years, then the rate of interest per annum is :
 (A) 2% (B) 3% (C) 4% (D) None of these.

47. The simple interest on a sum of money is $\frac{4}{9}$ of principal. Find the rate per cent and time, if both are numerically equal.
- (A) $\left(5\frac{2}{3}\%, 5\frac{2}{3}\right)$ (B) $\left(6\frac{2}{3}\%, 6\frac{2}{3}\right)$ (C) $\left(6\frac{1}{3}\%, 6\frac{1}{2}\right)$ (D) None of these.
48. The rate at which a sum becomes four times of itself in 15 years at S.I. will be :
- (A) 15% (B) $17\frac{1}{2}\%$ (C) 20% (D) 25%
49. A sum of money amounts to Rs. 9800 after 5 years and Rs. 12005 after 8 years at the same rate of simple interest. The rate of interest per annum is :
- (A) 5% (B) 8% (C) 12% (D) 15%
50. A lent Rs. 5000 to B for 2 years and Rs. 3000 to C for 4 years on simple interest at the same rate of interest and received Rs. 2200 in all from both of them as interest. The rate of interest per annum is :
- (A) 5% (B) 7% (C) $7\frac{1}{8}\%$ (D) 10%
51. The simple interest on a certain sum of money at the rate of 5% p.a. for 8 years is Rs. 840. At what rate of interest the same amount of interest can be received on the same sum after 5 years ?
- (A) 6% (B) 8% (C) 9% (D) 10%
52. The difference between the simple interest received from two different sources on Rs. 1500 for 3 years is Rs. 13.50. The difference between their rates of interest is :
- (A) 0.1% (B) 0.2% (C) 0.3% (D) 0.4%
(E) None of these.
53. A man lends Rs. 10,000 in four parts. If he gets 8% on Rs. 2000; $7\frac{1}{2}\%$ on Rs. 4000 and $8\frac{1}{2}\%$ on Rs. 1400; what per cent must he get for the remainder, if his average annual interest is 8.13% ?
- (A) 7% (B) 9% (C) $9\frac{1}{4}\%$ (D) $10\frac{1}{2}\%$
54. A certain sum of money at simple interest amount to Rs. 2520 in 2 years and Rs. 2700 in 5 years. The rate per cent per annum is :
- (A) 3% (B) 2.5% (C) 3.5% (D) 4.5%
55. A sum of money doubles itself in 12 years if invested at simple interest. What is the rate of interest allowed on the investment ?
- (A) 9.5% (B) 8.25% (C) 8.5% (D) 8.33%
56. Mr. Vinod deposited a sum of Rs. 2,00,000 in a bank. After 2 years he withdraw Rs. 1,00,000. At the end of 5 years he received an amount of Rs. 1,70,000. The rate of interest is :
- (A) 10% (B) 8% (C) 6% (D) 5%
57. A sum of Rs. 725 is lent in the beginning of a year at a certain rate of interest. After 8 months, a sum of Rs. 362.50 more is lent but at the rate twice the former. At the end of the year, Rs. 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) None of these.

58. In how many years will a sum be double of itself at 10% simple interest ?
 (A) 7 (B) 9 (C) 10 (D) 12
59. How much time will it take for an amount of Rs. 450 to yield Rs. 81 as interest at 4.5% per annum of simple interest ?
 (A) 3.5 years (B) 4 years (C) 4.5 years (D) 5 years
60. Rahul invested Rs. 70000 in a bank at the rate of 6.5% p.a. simple interest rate. He received Rs. 85925 after the end of term. Find out the period for which sum was invested by Rahul.
 (A) 2.5 yrs. (B) 3.5 yrs. (C) 3 yrs. (D) 4 yrs.
61. In what time will Rs. 85000 amount to Rs. 157675 at 4.5% p.a. ?
 (A) 12 years (B) 15 years (C) 19 years (D) 21 years.
62. In what time will Rs. 1250 amount to Rs. 1550 at 6% per annum ?
 (A) 5 yrs. (B) 7 yrs. (C) 9 yrs. (D) 4 yrs.
63. If $P = \text{Rs. } 10000$; $I = \text{Rs. } 2500$; $R = 12\frac{1}{2}\%$, then the number of years will be :
 (A) $1\frac{1}{2}$ years (B) 2 years (C) 3 years (D) None of these.
64. In how much time would the simple interest on a certain sum be 0.125 times the principal at 10% per annum ?
 (A) $1\frac{1}{4}$ years (B) $1\frac{3}{4}$ years (C) $2\frac{1}{4}$ years (D) $2\frac{3}{4}$ years.
65. A sum of money doubles itself in 10 years. The number of years it would trebles itself is :
 (A) 25 years. (B) 15 years. (C) 20 years. (D) None of these.
66. If Rs. 1000 be invested at interest rate of 5% and the interest be added to the principal every 10 years, then the number of years in which it will amount to Rs. 2000 is
 (A) $16\frac{2}{3}$ years (B) $16\frac{1}{4}$ (C) 16 years (D) None of these.
67. If a certain sum of money is double in 8 years at a given simple interest, in how many years will it be four times ?
 (A) 20 yrs. (B) 24 yrs. (C) 18 yrs. (D) 25 yrs.
68. If Rs. 500 amounts to Rs. 725 at 9% simple interest in some time, what will Rs. 600 amount to at 11% in the same time ?
 (A) Rs. 870 (B) Rs. 930 (C) Rs. 910 (D) None of these.

ANSWERS

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|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. B. | 2. A. | 3. A. | 4. C. | 5. A. | 6. A. | 7. A. | 8. B. |
| 9. C. | 10. C. | 11. C. | 12. A. | 13. A. | 14. C. | 15. B. | 16. C. |
| 17. A. | 18. B. | 19. B. | 20. D. | 21. A. | 22. A. | 23. C. | 24. C. |
| 25. A. | 26. A. | 27. D. | 28. D. | 29. B. | 30. A. | 31. A. | 32. B. |
| 33. A. | 34. C. | 35. B. | 36. C. | 37. C. | 38. D. | 39. B. | 40. C. |
| 41. D. | 42. A. | 43. C. | 44. A. | 45. A. | 46. C. | 47. B. | 48. C. |
| 49. C. | 50. D. | 51. B. | 52. C. | 53. B. | 54. B. | 55. D. | 56. A. |
| 57. D. | 58. C. | 59. B. | 60. B. | 61. C. | 62. D. | 63. B. | 64. A. |
| 65. C. | 66. A. | 67. B. | 68. B. | | | | |

QUESTION BANK – 4(A)

MULTIPLE CHOICE QUESTIONS

Select the correct option out of the given ones :

1. The formula for simple interest is :

- (A) $\frac{P \times R \times T}{100}$ (B) $\frac{P \times R}{100 \times T}$ (C) $\frac{100 P}{R \times T}$ (D) $\frac{100 \times R \times T}{P}$

2. The simple interest on Rs. 1820 from June 9, 2006 to August 20, 2006 at $7\frac{1}{2}\%$ rate will be :

- (A) Rs. 22.50 (B) Rs. 27.30 (C) Rs. 28.80 (D) Rs. 29

3. A deposited an amount in a bank which gives 10% simple interest. At the end of the fifth year he received a total of Rs. 30,000. The amount deposited by him was :

- (A) Rs. 10,000 (B) Rs. 20,000 (C) Rs. 15000 (D) None of these.

4. In how many years, Rs. 150 will produce the same interest @ 8% as Rs. 800 produce in 3 years @ $4\frac{1}{2}\%$?
 (A) 6 (B) 8 (C) 9 (D) 12
5. If a sum of Rs. 1600 gives a simple interest of Rs. 252 in 2 years and 3 months, then the rate of interest per annum is :
 (A) 5% (B) 6% (C) 7% (D) None of these.
6. If the simple interest on a certain sum for 15 months at $7\frac{1}{2}\%$ per annum exceeds the simple interest on the same sum for 8 months at $12\frac{1}{2}\%$ per annum by Rs. 32.50, then the sum (in Rs.) is :
 (A) Rs. 3000 (B) Rs. 3060 (C) Rs. 3120 (D) Rs. 3250
7. What will be the simple interest earned on an amount of Rs. 16,800 in 9 months at the rate of $6\frac{1}{4}\%$ p.a. ?
 (A) Rs. 787.50 (B) Rs. 812.50 (C) Rs. 860 (D) Rs. 887.50
8. If a sum of money at certain rate of interest doubles in 5 years and at a different rate of interest becomes three times in 12 years, the better rate of interest is :
 (A) 10% (B) 20% (C) 30% (D) None of these.
9. A sum of money lent out at simple interest amounts to Rs. 720 after 2 years and to Rs. 1020 after a further period of 5 years. The sum is :
 (A) Rs. 500 (B) Rs. 600 (C) Rs. 700 (D) Rs. 710
10. In what time will Rs. 1800 yield simple interest of Rs. 390 at the rate of 5% per annum ?
 (A) 5 years 2 months (B) 4 years 4 months (C) 4 years 5 months (D) None of these.
11. A certain sum is invested for certain time. It amounts to Rs. 450 at 7% per annum. But when invested at 5% per annum, it amounts to Rs. 350. Find the sum.
 (A) Rs. 60 (B) Rs. 100 (C) Rs. 120 (D) None of these.
12. If Rs. 64 amounts to Rs. 83.20 in 2 years, what will Rs. 86 amount to in 4 years at the same rate per cent per annum ?
 (A) Rs. 114.80 (B) Rs. 124.70 (C) Rs. 127.40 (D) Rs. 137.60
13. The interest on a certain deposit at 9% per annum is Rs. 405 in one year. How much will the additional interest in one year be on the same deposit at 10 per cent per annum ?
 (A) Rs. 450 (B) Rs. 300 (C) Rs. 31.50 (D) None of these.
14. The simple interest on Rs. 10 for 4 months at the rate of 3 paise per rupee per month is :
 (A) Rs. 1.20 (B) Rs. 1.60 (C) Rs. 2.40 (D) Rs. 3.60
15. A certain sum is invested for T years. It amounts to Rs. 400 at 10% per annum. But when invested at 4% per annum, it amounts to Rs. 200. Find the time (T).
 (A) 41 years (B) 39 years (C) 50 years (D) None of these.
16. What principal will amount to Rs. 15000 at 10% per annum in 5 years?
 (A) Rs. 10000 (B) Rs. 8700 (C) Rs. 10500 (D) None of these.
17. A sum of Rs. 7700 is to be divided among three brothers Vikas, Vijay and Viraj in such a way that simple interest on each part at 5% per annum after 1, 2 and 3 years, respectively remains equal. The share of Vikas is more than that of Viraj by :
 (A) Rs. 2800 (B) Rs. 2500 (C) Rs. 3000 (D) None of these.

18. If the simple interest on a certain sum at a rate of 4% for 5 years is Rs. 800, the sum is :
(A) Rs. 3000 (B) Rs. 4000 (C) Rs. 4400 (D) None of these.
19. The simple interest on a sum of money will be Rs. 600 after 10 years. If the principal is trebled after 5 years, what will be the total interest at the end of the tenth year ?
(A) Rs. 1200 (B) Rs. 1190 (C) Rs. 1210 (D) None of these.
20. A certain sum of money at simple interest amounts to Rs. 1260 in 2 years and to Rs. 1350 in 5 years. The rate per cent per annum is :
(A) 1.5% (B) 2.5% (C) 3.5% (D) None of these.
21. A person invested $\frac{2}{3}$ rd of his capital at 3% ; $\frac{1}{6}$ th at 6% and the remainder at 12%. If his annual income is Rs. 25, then the capital is :
(A) Rs. 490 (B) Rs. 510 (C) Rs. 500 (D) None of these.
22. A sum of money at simple interest amounts to Rs. 2800 in 2 years and to Rs. 3250 in 5 years at the rate of
(A) 4% (B) 6% (C) 3% (D) None of these.
23. The simple interest on a sum of money will be Rs. 600 after 10 years. If the principal is trebled after 5 years, what will be the total interest at the end of the tenth year ?
(A) Rs. 600 (B) Rs. 900 (C) Rs. 1200 (D) Rs. 1500
24. How long will it take a sum of money invested at 5% p.a. S.I. to increase its value by 40% ?
(A) 5 years (B) 6 years (C) 7 years (D) 8 years
25. In what time will Rs. 72 become Rs. 81 at 6.25% per annum simple interest ?
(A) 2 years (B) 3 years (C) 4 years (D) None of these.
26. A person borrowed Rs. 500 @ 3% per annum S.I. and Rs. 600 @ 4.5% per annum on the agreement that the whole sum will be returned only when the total interest becomes Rs. 126. The number of years, after which the borrowed sum is to be returned, is :
(A) 2 (B) 3 (C) 4 (D) 5
27. The simple interest on a sum of money at 8% per annum for 6 years is half the sum. The sum is :
(A) Rs. 4800 (B) Rs. 6000 (C) Rs. 8000 (D) Data inadequate
28. Mr. Gupta deposits Rs. 3000 in a bank at 10% per annum and Rs. 5000 in another bank at 8% per annum. The rate of interest for the whole sum is :
(A) $8\frac{1}{2}\%$ (B) $8\frac{3}{4}\%$ (C) 8% (D) None of these.
29. A lends Rs. 2500 to B and a certain sum to C at the same time at 7% p.a. simple interest. If after 4 years, A altogether receives Rs. 1120 as interest from B and C, then the sum lent to C is :
(A) Rs. 700 (B) Rs. 1500 (C) Rs. 4000 (D) Rs. 6500
30. Nitin borrowed some money at the rate of 6% p.a. for the first three years ; 9% p.a. for the next five years and 13% p.a. for the period beyond eight years. If the total interest paid by him at the end of eleven years is Rs. 8160, how much money did he borrow ?
(A) Rs. 8000 (B) Rs. 10,000 (C) Rs. 12,000 (D) None of these.
31. At simple interest Rs. 800 become Rs. 920 in 3 years. If rate of interest is increased by 3% then total amount will become
(A) Rs. 992 (B) Rs. 995 (C) Rs. 192 (D) None of these.

32. A borrowed some money from B at 12% p.a. S.I. for 3 years. He then added some more money to the borrowed sum and lent it to C for the same period at 14% p.a. rate of interest. If a gains Rs. 93.90 in the whole transaction, how much money did he add from his side ?
 (A) Rs. 35 (B) Rs. 55 (C) Rs. 80 (D) Rs. 105
33. In how many years will Rs. 5500 amount to Rs. 6600 at the rate of 5% simple interest.
 (A) 4 years (B) 5 years (C) 6 years (D) None of these.
34. If simple interest on a certain sum of money for 4 years at 5% p.a. is same as the simple interest on Rs. 560 for 10 years at the rate of 4% p.a., then the sum of money is :
 (A) Rs. 1190 (B) Rs. 1120 (C) Rs. 1210 (D) None of these.
35. A sum of money becomes $(7/6)$ of itself in 3 years at a certain rate of simple interest. The rate per annum is :
 (A) $5\frac{5}{9}\%$ (B) $6\frac{5}{9}\%$ (C) 18% (D) 25%
36. The simple interest on a certain sum for 3 years at 4% per annum is Rs. 48. The principal is :
 (A) Rs. 200 (B) Rs. 400 (C) Rs. 500 (D) None of these.
37. A sum invested at 5% simple interest per annum grows to Rs. 504 in 4 years. The same amount at 10% simple interest per annum in 2 years and six months will grow to :
 (A) Rs. 420 (B) Rs. 450 (C) Rs. 525 (D) Rs. 550
38. If a certain sum of money amounts to Rs. 1760 in two years and Rs. 2000 in 5 years at simple interest, then the sum is :
 (A) Rs. 1960 (B) Rs. 1590 (C) Rs. 1600 (D) None of these.
39. At what rate per cent of simple interest will a sum of money double itself in 12 years ?
 (A) $8\frac{1}{4}\%$ (B) $8\frac{1}{3}\%$ (C) $8\frac{1}{2}\%$ (D) $9\frac{1}{2}\%$
40. A sum of money at simple interest amounts to Rs. 815 in 3 years and to Rs. 854 in 4 years. The sum is :
 (A) Rs. 650 (B) Rs. 690 (C) Rs. 698 (D) Rs. 700
41. A sum was put at simple interest at a certain rate for 4 years. Had it been put at 2% higher rate, it would have fetched Rs. 56 more. The sum is :
 (A) Rs. 680 (B) Rs. 700 (C) Rs. 720 (D) None of these.
42. They earned a profit of Rs. 800. One half of the profit was divided equally among them and other half was divided in the proportion of their capitals. How much did each of them receive ?
 (A) Rs. 430 and Rs. 370 (B) Rs. 440 and Rs. 360
 (C) Rs. 350 and Rs. 450 (D) None of these.
43. An automobile financier claims to be lending money at simple interest, but he includes the interest every six months for calculating the principal. If he is charging an interest of 10%, the effective rate of interest becomes :
 (A) 10% (B) 10.25% (C) 10.5% (D) none of these.
44. If the interest on Rs. 800 be more than the interest on Rs. 400 by Rs. 40 in 2 years, then the rate of interest per annum is :
 (A) 5% (B) $5\frac{1}{2}\%$ (C) 6% (D) None of these.

45. A man invests a certain sum of money at 6% p.a. simple interest and another sum at 7% p.a. simple interest. His income from interest after 2 years was Rs. 354. One-fourth of the first sum is equal to one-fifth of the second sum. The total sum invested was :
- (A) Rs. 2600 (B) Rs. 2700 (C) Rs. 2880 (D) Rs. 2900
46. A certain amount doubles itself in 8 years at simple interest. At the same rate it will become 3 times in how many years ?
- (A) 18 years (B) 16 years (C) 14 years (D) None of these.
47. If the difference between the simple interest on a certain sum for 4 years at 2.5% per annum and the simple interest on the same sum for the same period at 3% per annum is Rs. 60, then the sum is :
- (A) Rs. 3000 (B) Rs. 2900 (C) Rs. 3100 (D) None of these.
48. The interest on a certain deposit at 4.5% p.a. is Rs. 202.50 in one year. How much will the additional interest in one year be on the same deposit at 5% p.a. ?
- (A) Rs. 20.25 (B) Rs. 22.50 (C) Rs. 25 (D) Rs. 42.75
49. The sum of money that will produce Rs. 1770 interest in 7 years and six months at 8% simple interest per annum is :
- (A) Rs. 2950 (B) Rs. 3120 (C) Rs. 2800 (D) None of these.
50. What should be the least number of years in which the simple interest on Rs. 2600 at $6\frac{2}{3}\%$ will be an exact number of rupees ?
- (A) 2 (B) 3 (C) 4 (D) 5
51. Rakesh borrowed Rs. 5000 from Ganesh at simple interest. If Ganesh got Rs. 500 more than his capital after 5 years, then the rate of interest per annum is :
- (A) 2% (B) 3% (C) 4% (D) None of these.
52. Anshul invested an amount of Rs. 12,000 at the rate of 10% p.a. simple interest and another amount at the rate of 20% p.a. simple interest. The total interest earned at the end of one year on the total amount invested became 14% p.a. Find the total amount invested.
- (A) Rs. 20,000 (B) Rs. 22,000 (C) Rs. 24,000 (D) Rs. 25,000
53. A certain amount earns simple interest of Rs. 1750 after 7 years. Had the interest been 2% more, how much more interest would it have earned ?
- (A) Rs. 35 (B) Rs. 245 (C) Rs. 350 (D) Cannot be determined
54. Divide Rs. 2379 into 3 parts so that their amounts after 2, 3 and 4 years respectively may be equal, the rate of interest being 5% per annum at simple interest. The first part is :
- (A) Rs. 759 (B) Rs. 792 (C) Rs. 818 (D) Rs. 828
55. I derive an annual income of Rs. 688.25 from Rs. 10,000 invested partly at 8% p.a. and partly at 5% p.a. simple interest. How much of my money is invested at 5% ?
- (A) Rs. 3,725 (B) Rs. 4225 (C) Rs. 4,800 (D) Rs. 5,000
56. Rs. 800 becomes Rs. 956 in 3 years at a certain rate of simple interest. If the rate of interest is increased by 4%, what amount will Rs. 800 become in 3 years ?
- (A) Rs. 1020.80 (B) Rs. 1025 (C) Rs. 1052 (D) None of these.
57. What annual rate of interest was paid, if Rs. 10000 earned Rs. 1000 as interest in 2 years?
- (A) 2% (B) 5% (C) 10% (D) 20%

58. A person invested in all Rs. 2600 at 4%, 6% and 8% per annum simple interest. At the end of the year, he got the same interest in all the three cases. The money invested at 4% is :
 (A) Rs. 200 (B) Rs. 600 (C) Rs. 800 (D) Rs. 1200
59. The simple interest at $x\%$ for x years will be Rs. x on a sum of :
 (A) Rs. x (B) Rs. $(100/x)$ (C) Rs. $100x$ (D) Rs. $(100/x^2)$
60. A man invested $(1/3)$ of his capital at 7% ; $(1/4)$ at 8% and the remainder at 10%. If his annual income is Rs. 561, the capital is :
 (A) Rs. 5400 (B) Rs. 6000 (C) Rs. 6600 (D) Rs. 7200
61. A sum of money doubles itself in 8 years. In how many years will it treble ?
 (A) 16 years (B) 15 years (C) 14 years (D) none of these.
62. The rate of interest on a sum of money is 4% per annum for the first 2 years, 6% per annum for the next 4 years and 8% per annum for the period beyond 6 years. If the simple interest accrued by the sum for a total period of 9 years is Rs. 1120, then the sum is
 (A) Rs. 2400 (B) Rs. 2200 (C) Rs. 2000 (D) none of these.
63. How much interest will Rs. 10,000 earn in 9 months at an annual rate of 6 per cent ?
 (A) 450 (B) 475 (C) 500 (D) 600
64. Simple interest on a certain amount is $(9/16)$ 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) 5.5 years (B) 6.5 years (C) 7.5 years (D) 7 years
65. In how many years will a sum of money treble itself at 10% per annum simple interest ?
 (A) 15 years (B) 19 years (C) 20 years (D) none of these.
66. Mr. Anand deposited a total amount of Rs. 65000 in three different schemes A, B and C with rates of interest 12 % p.a, 16 % p.a. and 18 % p.a. respectively and earned a total interest of Rs. 10,180 in one year. If the amount invested in Scheme A was 72% of the amount invested in Scheme C, then what was the amount invested in Scheme B ?
 (A) Rs. 25000 (B) Rs. 22000 (C) Rs. 18000 (D) None of these
67. Ravi gave Rs. 1200 on loan. Some amount he gave at 4% per annum simple interest and remaining at 5% per annum simple interest. After two years, he got Rs. 110 as interest. Then the amounts given at 4% and 5% per annum simple interest are respectively,
 (A) Rs. 500, Rs. 700 (B) Rs. 400, Rs. 800
 (C) Rs. 800, Rs. 300 (D) Rs. 1100, Rs. 1100
68. Simple interest on a certain sum at a certain annual rate of interest is $(1/9)$ of the sum. If the numbers representing rate percent and time in years be equal, then the rate of interest is :
 (A) $3\frac{1}{3}\%$ (B) 5% (C) $6\frac{2}{3}\%$ (D) 10%
69. A sum of money at simple interest becomes four times in 24 years. The rate per cent of interest per annum is :
 (A) 13.75% (B) 12.5% (C) 11.75% (D) none of these.
70. A sum of money trebles itself in 15 years 6 months. In how many years would it double itself ?
 (A) 6 years 3 months (B) 7 years 9 months (C) 8 years (D) 9 years

71. Vikram borrowed Rs. 6450 at 5 % simple interest repayable in 4 equal instalments. What will be the annual instalment payable by him ?
- (A) Rs. 1710 (B) Rs. 1810 (C) Rs. 1910 (D) Rs. 1860

ANSWERS

- | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. A. | 2. B | 3. B. | 4. C | 5. C | 6. C | 7. A. | 8. B. |
| 9. B. | 10. B. | 11. B. | 12. D. | 13. A. | 14. A. | 15. C | 16. A. |
| 17. A. | 18. B. | 19. A. | 20. B. | 21. C. | 22. B. | 23. C. | 24. D. |
| 25. A. | 26. B. | 27. D. | 28. B. | 29. B. | 30. A. | 31. A. | 32. D. |
| 33. A. | 34. B. | 35. A. | 36. B. | 37. C. | 38. C. | 39. B. | 40. C. |
| 41. B. | 42. C. | 43. B. | 44. A. | 45. B. | 46. B. | 47. A. | 48. B. |
| 49. A. | 50. B. | 51. A. | 52. A. | 53. D. | 54. D. | 55. A. | 56. C. |
| 57. B. | 58. D. | 59. B. | 60. C. | 61. A. | 62. C. | 63. A. | 64. C. |
| 65. C. | 66. B. | 67. A. | 68. A. | 69. B. | 70. B. | 71. B. | |

EXERCISE – 4.2

MULTIPLE CHOICE QUESTIONS

Select the correct option out of the given ones :

- The compound interest on Rs. 3000 for 3 years at 12% p.a. compounded annually is :
(A) Rs. 1214.58 (B) Rs. 1114.58 (C) Rs. 1314.58 (D) Rs. 1014.58
- The compound interest on Rs. 2000 at 5% per annum, compounded yearly, for 2 years is :
(A) Rs. 315 (B) Rs. 425 (C) Rs. 205 (D) none of these.
- Rs. 2000 is invested at annual rate of interest of 10%. What is the amount after two years if compounding is done annually.
(A) Rs. 2420 (B) Rs. 2320 (C) Rs. 2120 (D) Rs. 2020
- What will be the compound interest on a sum of Rs. 25,000 after 3 years at the rate of 12% p.a. ?
(A) Rs. 9000.30 (B) Rs. 9720 (C) Rs. 10123.20 (D) Rs. 10483.20
(E) none of these.
- Nikita invested Rs. 8000 for 3 years at 5% CI in a post office. If the interest is compounded once in a year, what sum will she get after 3 years ?
(A) Rs. 9261 (B) Rs. 8265 (C) Rs. 9365 (D) None of these.
- A man saves Rs. 200 at the end of each year and lends the money at 5% compound interest. How much will it become at the end of 3 years ?
(A) Rs. 565.25 (B) Rs. 635 (C) 662.02 (D) 666.50
- What sum will amount to Rs. 6525 at 10% per annum compounded yearly for 13 years ?
(A) Rs. 2889 (B) Rs. 1889 (C) Rs. 3889 (D) Rs. 1089

8. Determine the compound interest on Rs. 1000 at 6% compounded semi-annually for 6 years.
[Given that $(1 + i)^n = 1.42576$ for $i = 3\%$ and $n = 12$.]
(A) Rs. 425.76 (B) 450.76 (C) Rs. 475.76 (D) Rs. 325.76
9. What is the difference between the compound interests on Rs. 5000 for 1.5 years at 4% per annum compounded yearly and half-yearly?
(A) Rs. 2.04 (B) Rs. 3.06 (C) Rs. 4.80 (D) Rs. 8.30
10. Find the present worth of Rs. 9261 due 3 years hence at 5% per annum compounded yearly.
(A) Rs. 7000 (B) Rs. 8000 (C) Rs. 9000 (D) none of these.
11. Sam invested Rs. 15,000 @ 10% per annum for one year. If the interest is compounded half-yearly, then the amount received by Sam at the end of the year will be :
(A) Rs. 16,500 (B) Rs. 16,525.50 (C) Rs. 16,537.50 (D) Rs. 18,150
12. The compound interest on Rs. 10000 at 20% per annum at the end of 1 year 6 months if the interest is calculated half-yearly will be :
(A) Rs. 5320 (B) Rs. 3310 (C) Rs. 4340 (D) None of these.
13. The compound interest on Rs. 4000 for 1.5 years at 10% per annum compounded half-yearly is :
(A) Rs. 630.50 (B) Rs. 530.50 (C) Rs. 430.50 (D) Rs. 730.50
14. What will be the difference in the compound interest on Rs. 50,000 at 12% for one year, when the interest is paid yearly and half-yearly?
(A) Rs. 500 (B) Rs. 600 (C) Rs. 180 (D) Rs. 360
15. A bank offers 5% compound interest calculated on half-yearly basis. A customer deposits Rs. 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) Rs. 120 (B) Rs. 121 (C) Rs. 122 (D) Rs. 123
16. A sum put out at 4% compound interest payable half-yearly amounts to Rs. 6632.55 in one year and 6 months. The sum is :
(A) Rs. 6530 (B) Rs. 6250 (C) Rs. 6470 (D) None of these.
17. The difference between simple interest and compound interest on Rs. 1200 for one year at 10% per annum reckoned half-yearly is :
(A) Rs. 2.50 (B) Rs. 3 (C) Rs. 3.75 (D) Rs. 4
18. A sum of money lent at compound interest for 2 years at 20% per annum would fetch Rs. 482 more, if the interest was payable half-yearly than if it was payable annually. The sum is :
(A) Rs. 10,000 (B) Rs. 20,000 (C) Rs. 40,000 (D) Rs. 50,000
19. What will be the difference between simple and compound interest @ 10% per annum on a sum of Rs. 1000 after 4 years?
(A) Rs. 31 (B) Rs. 32.10 (C) Rs. 40.40 (D) Rs. 64.10
20. The compound interest on Rs. 12000 for 9 months at 20% per annum, interest being compounded quarterly is :
(A) Rs. 1891.50 (B) Rs. 1901.50 (C) Rs. 1791.50 (D) None of these.
21. The difference between the simple interest and the compound interest on Rs. 60 for 1 year at 10% per annum, reckoned half-yearly is :
(A) Re. 1 (B) Rs. 1.50 (C) Rs. 2 (D) None of these.

22. If the simple interest on a sum of money for 2 years at 5% per annum is Rs. 50, what is the compound interest on the same sum at the same rate and for the same time ?
 (A) Rs. 51.25 (B) Rs. 52 (C) Rs. 54.25 (D) Rs. 60
23. The compound interest on Rs. 16,000 at 20% per annum for 9 months, compounded quarterly is :
 (A) Rs. 2422 (B) Rs. 2522 (C) Rs. 2322 (D) Rs. 2622
24. If the compound interest on a certain sum at $16\frac{2}{3}\%$ for 3 years is Rs. 1270, the simple interest on the same sum at the same rate and for the same period is :
 (A) Rs. 1080 (B) Rs. 1050 (C) Rs. 1030 (D) Rs. 1010
25. The compound interest on a sum of money for 2 years is Rs. 832 and the simple interest on the same sum for the same period is Rs. 800. The difference between the compound interest and the simple interest for 3 years will be :
 (A) Rs. 48 (B) Rs. 66.56 (C) Rs. 98.56 (D) None of these.
26. The compound interest on a certain sum for 2 years at 10% per annum is Rs. 525. The simple interest on the same sum for double the time at half the rate per cent per annum is :
 (A) Rs. 400 (B) Rs. 500 (C) Rs. 600 (D) Rs. 800
27. On what sum will the compound interest at 5% per annum for two years compounded annually be Rs. 1640 ?
 (A) Rs. 15000 (B) Rs. 16000 (C) Rs. 17000 (D) Rs. 18000.
28. What annual rate of interest compounded annually doubles an investment in 7 years ? Given that $2^{1/7} = 1.104090$.
 (A) 1.41% (B) 13.41% (C) 12.41% (D) 11.41%
29. Find the rate per cent per annum if Rs. 200000 amount to Rs. 231525 in 1.5 years interest being compounded half-yearly.
 (A) 5% (B) 10% (C) 1.5% (D) 7.5%
30. In what time will Rs. 8000 amount to Rs. 8820 at 10% per annum interest compounded half-yearly ?
 (A) 1 yrs. (B) 2 yrs. (C) 1.5 yrs. (D) 2.5 yrs.
31. At what rate per cent per annum will Rs. 1000 amount to Rs. 1331 in 3 years? The interest is compounded yearly.
 (A) 10% p.a. (B) 12% p.a. (C) 13% p.a. (D) None of these.
32. If Rs. 500 amounts to Rs. 583.20 in two years compounded annually, find the rate of interest per annum.
 (A) 6% (B) 7% (C) 8% (D) 9%
33. The compound interest on Rs. 30,000 at 7% per annum is Rs. 4347. The period (in years) is :
 (A) 2 (B) 2.5 (C) 3 (D) 4
34. A certain sum invested at 4% per annum compounded semi-annually amounts to Rs. 78030 at the end of one year. The sum is :
 (A) Rs. 70,000 (B) Rs. 75,000 (C) Rs. 85,000 (D) Rs. 65,000
35. Rs. 16000 invested at 10% p.a. compounded semi-annually amounts to Rs. 18522. The time period of investment is :
 (A) 1 yr. (B) 1.5 yrs. (C) 2 yrs. (D) 2.5 yrs.

36. The difference between the simple interest on a certain sum at the rate of 10% per annum for 2 years and compound interest which is compounded every 6 months is Rs. 124.05. What is the principal sum ?
 (A) Rs. 6000 (B) Rs. 8000 (C) Rs. 10,000 (D) Rs. 12,000
37. The difference between the compound interest and simple interest on a certain sum at 5% for 2 years is Rs. 1.50. The sum is :
 (A) Rs. 700 (B) Rs. 600 (C) Rs. 500 (D) None of these.
38. The difference between the compound interest and simple interest on a certain sum at 3% per annum for 3 years is Rs. 27.27. The sum is :
 (A) Rs. 12000 (B) Rs. 15000 (C) Rs. 10000 (D) None of these.
39. The difference between compound interest and simple interest on an amount of Rs. 15,000 for 2 years is Rs. 96. What is the rate of interest per annum ?
 (A) 8 (B) 10 (C) 12 (D) None of these.
40. The difference between the compound interest and the simple interest on Rs. 8000 for 3 years at 5% per annum is :
 (A) Rs. 61 (B) Rs. 63 (C) Rs. 65 (D) None of these.
41. The difference between simple interest and compound interest on a sum of money for 2 years is Rs. 15. The simple interest on the same sum for 4 years is Rs. 1200. The sum is :
 (A) Rs. 6000 (B) Rs. 6500 (C) Rs. 7000 (D) Rs. 8000
42. The difference between simple interest and compound interest on Rs. 1250 for 2 years at 4% p.a. is :
 (A) Rs. 3 (B) Rs. 4 (C) Rs. 2 (D) None of these.
43. A sum of money invested at compound interest amounts to Rs. 4624 in 2 years and to Rs. 4913 in 3 years. The sum of money is :
 (A) Rs. 4096 (B) Rs. 4260 (C) Rs. 4335 (D) Rs. 4360
44. If the compound interest on a certain sum for 2 years is Rs. 105 and simple interest is Rs. 100, then the sum is :
 (A) Rs. 300 (B) Rs. 500 (C) Rs. 400 (D) None of these.
45. The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 4% per annum is Re. 1. The sum (in Rs.) is :
 (A) 625 (B) 630 (C) 640 (D) 650
46. A bank offers 10% interest rate compounded annually. A person deposits Rs. 10,000 every year in his account. If he does not withdraw any amount, then how much balance will his account show after four years ?
 (A) Rs. 51051 (B) Rs. 45095 (C) Rs. 36410 (D) Rs. 51000
47. Akash borrows Rs. 65,000 at 10% p.a. simple interest for 3 years and lends it at 10% p.a. compound interest for 3 years. Find his gain after three years.
 (A) Rs. 2015 (B) Rs. 1330 (C) Rs. 1300 (D) None of these.
48. What annual payment will discharge a debt of Rs. 7620 due in 3 years at $16\frac{2}{3}\%$ per annum compound interest ?
 (A) Rs. 3430 (B) Rs. 2430 (C) Rs. 3530 (D) Rs. 3630
49. The difference between the simple interest and the compound interest compounded annually at the rate of 12% per annum of Rs. 5000 for two years will be :
 (A) Rs. 17.50 (B) Rs. 36 (C) Rs. 45 (D) Rs. 72

50. Rohit earns an interest of Rs. 1656 for the third year and Rs. 1440 for the second year on the same sum. Find the rate of interest if it is lent at compound interest.
(A) 18% (B) 12% (C) 15% (D) None of these.
51. A sum is invested for 3 years compounded at 5%, 10% and 20% respectively. In three years, if the sum amounts to Rs. 16,632, then the sum is :
(A) Rs. 11000 (B) Rs. 12000 (C) Rs. 13000 (D) Rs. 14000
52. If the difference between the simple and the compound interests on some principal amount at 20% for 3 years is Rs. 48, then the principal amount must be :
(A) Rs. 650 (B) Rs. 600 (C) Rs. 375 (D) Rs. 400
53. In what time will a sum of money double itself at 10% p.a. compound interest payable half yearly ?
(A) 7 yrs. (B) 7.1 yrs (C) 7.2 yrs. (D) 7.3 yrs.
54. Ajay intends to invest a sum of money which will amount to Rs. 10,000 in 10 years at 8 per cent compound interest, what amount should he invest ?
(A) Rs. 4634 (B) Rs. 4654 (C) Rs. 4674 (D) Rs. 4694
55. The difference between the simple and compound interest on a certain sum for 3 years at 5% p.a. is Rs. 228.75. The compound interest on the sum for 2 years at 5% p.a. is :
(A) Rs. 3175 (B) Rs. 3075 (C) Rs. 3275 (D) Rs. 2975
56. When a boy is born, Rs. 500.00 is placed to his credit in an account that pays at the rate of 6% compounded monthly. If the account is not disturbed, what amount will there be to his credit on his twentieth birth-day ?
(A) Rs. 1659 (B) Rs. 1626 (C) Rs. 1603 (D) Rs. 1600
57. In the question 56, if the interest is compounded quarterly, then the amount on his twentieth birthday will be :
(A) Rs. 1659 (B) Rs. 1626 (C) Rs. 1603 (D) Rs. 1600.
58. What rate of C.I. for a sum of Rs. 8000 will amount to Rs. 8820 in 2 years if the interest is calculated every year ?
(A) 5% (B) 6% (C) 6.5% (D) 7%
59. In how many years a certain sum will treble itself at 4% compound interest ?
(A) 28.06 yrs. (B) 27.06 yrs. (C) 25.06 yrs. (D) 24.06 yrs.
60. The difference between simple interest and compound interest on a certain sum for 3 years at 5% per annum is Rs. 76.25. The sum is :
(A) Rs. 8,000 (B) Rs. 9,000 (C) Rs. 10,000 (D) Rs. 11,000.
61. Find the compound interest on Rs. 250 for $(\frac{3}{4})$ years at 16% per annum, when the interest is calculated quarterly.
(A) Rs. 30.10 (B) Rs. 31.10 (C) Rs. 32.10 (D) Rs. 35.10
62. Anshul's father wishes to have Rs. 75,000 in a bank account when his first college expenses begin. How much amount his father should deposit now at 6.5% compounded annually if Anshul is to start college in 8 years hence from now ?
(A) Rs. 45,360 (B) Rs. 46,360 (C) Rs. 55,360 (D) Rs. 48,360.
63. How long will it take Rs 12,000 to amount to Rs. 20,000 at 5% converted quarterly ?
(A) 10 yrs 6 months (B) 10 yrs 8 months
(C) 10 yrs 9 months (D) None of these.

64. A person deposited Rs. 5000 in a bank. The deposit was left to accumulate at 6% compounded quarterly for the first five years and at 8% compounded semi-annually for the next eight years. The compound amount at the end of 13 years is :
 (A) Rs. 12621.50 (B) Rs. 12613.10 (C) Rs. 13613.10 (D) None of these.
65. A sum of money invested now at $x\%$ per annum compound interest quadruples itself in 13 years Find x .
 (A) 8% (B) 7% (C) 6% (D) 5%

ANSWERS

- | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. A. | 2. C | 3. A. | 4. C | 5. A. | 6. C | 7. B. | 8. A. |
| 9. A. | 10. B. | 11. C. | 12. B. | 13. A. | 14. C. | 15. B. | 16. B. |
| 17. B. | 18. B. | 19. D. | 20. A. | 21. B. | 22. A. | 23. B. | 24. A. |
| 25. C. | 26. B. | 27. B. | 28. A. | 29. B. | 30. A. | 31. A. | 32. C. |
| 33. A. | 34. B. | 35. B. | 36. B. | 37. B. | 38. C. | 39. A. | 40. A. |
| 41. A. | 42. C. | 43. A. | 44. B. | 45. A. | 46. A. | 47. A. | 48. A. |
| 49. D. | 50. C. | 51. B. | 52. C. | 53. B. | 54. A. | 55. B. | 56. A. |
| 57. B. | 58. A. | 59. A. | 60. C. | 61. B. | 62. A. | 63. B. | 64. B. |
| 65. A. | | | | | | | |

QUESTION BANK - 4(B)

MULTIPLE CHOICE QUESTIONS

Select the correct option out of the given ones:

- What sum will amount to Rs. 2,00,000 in 5 years at 10% p.a. compound interest ?
(A) 124170 (B) 124190 (C) 124181 (D) 124270
- The C.I. on Rs. 16000 for 1.5 years at 10% p.a. payable half-yearly is :
(A) Rs. 2222 (B) Rs. 2522 (C) Rs. 2500 (D) None of these.
- What sum of money at compound interest will amount to Rs. 650 at the end of the first year and Rs. 676 at the end of the second year ?
(A) Rs. 825 (B) Rs. 925 (C) Rs. 625 (D) None of these.
- A sum of money invested at compound interest amounts to Rs. 800 in 3 years and to Rs. 840 in 4 years. The rate of interest per annum is :
(A) $2\frac{1}{2}\%$ (B) 4% (C) 5% (D) $6\frac{2}{3}\%$
- If a sum of money at compound interest amounts to thrice itself in 3 years, then in how many years will it be 9 times itself ?
(A) 9 years (B) 6 years (C) 7 years (D) None of these.
- At what rate of compound interest per annum will a sum of Rs. 1200 become Rs. 1348.32 in 2 years ?
(A) 6% (B) 6.5% (C) 7% (D) 7.5%
- The C.I. on Rs. 40000 at 10% p.a. for 1 year when the interest is payable quarterly is :
(A) Rs. 4000 (B) Rs. 4100 (C) Rs. 4152.51 (D) None of these.
- Find the compound interest on Rs. 15,625 for 9 months at 16% per annum compounded quarterly.
(A) Rs. 1851 (B) Rs. 1941 (C) Rs. 1951 (D) Rs. 1961
- Rs. 100 will become after 20 years at 5% p.a. compound interest calculated annually
(A) Rs. 250 (B) Rs. 265 (C) Rs. 265.50 (D) None of these.
- If A = Rs. 1000, $n = 2$ years, $R = 6\%$ p.a. compound interest payable half-yearly then principal (P) is :
(A) Rs. 888.80 (B) Rs. 880 (C) Rs. 800 (D) none of these.
- At what rate per cent compound interest does a sum of money become 16 times in 4 years ?
(A) 75% (B) 100% (C) 50% (D) None of these.
- A sum of Rs. 12,000 deposited at compound interest becomes double after 5 years. After 20 years, it will become :
(A) Rs. 96,000 (B) Rs. 1,20,000 (C) Rs. 1,24,000 (D) Rs. 1,92,000
- A certain sum of money at compound interest grows up to Rs. 12960 in 2 years and up to Rs. 13176 in 3 years. The rate per cent annum is :
(A) $1\frac{1}{3}\%$ (B) $2\frac{1}{3}\%$ (C) $1\frac{2}{3}\%$ (D) None of these.
- The C.I. on Rs. 4000 for 6 months at 12% p.a. payable quarterly is :
(A) Rs. 243.60 (B) Rs. 240 (C) Rs. 243 (D) None of these.
- The compound interest on Rs. 4000 for 2 years at the rate of 10% per annum is :
(A) 840 (B) 780 (C) 820 (D) None of these.

16. What will be the compound interest on a sum of Rs. 1875 after 2 years if the rate of interest for the first year is 4% and that for the second year is 8% ?
(A) Rs. 231 (B) Rs. 341 (C) Rs. 241 (D) None of these.
17. The compound interest on Rs. 20,480 at 6.25% per annum for 2 years 73 days, is :
(A) Rs. 2929 (B) Rs. 3000 (C) Rs. 3131 (D) Rs. 3636
18. What will be the amount if a sum of Rs. 5000 is placed at compound interest for 3 years while rate of interest for the first, second and third years is 2% ; 3% and 4%, respectively ?
(A) Rs. 5643.12 (B) Rs. 5463.12 (C) Rs. 6413.12 (D) none of these.
19. A sum of money is borrowed on compound interest for 2 years at 20% and it would fetch Rs. 482 more if the interest was payable half yearly than if were payable yearly, then the borrowed sum is :
(A) Rs. 15,000 (B) Rs. 20,000 (C) Rs. 30,000 (D) none of these.
20. The principal that amounts to Rs. 4913 in 3 years at 6.25% per annum compound interest compounded annually, is :
(A) Rs. 3096 (B) Rs. 4076 (C) Rs. 4085 (D) Rs. 4096
21. If in a certain number of years Rs. 3000 amount to Rs. 4320 at compound interest, in half that time Rs. 3000 will amount to :
(A) Rs. 3400 (B) Rs. 3600 (C) Rs. 3800 (D) Rs. 3520
22. A man deposits Rs. 1200 on the first day of every year in a bank paying 5% p.a. compound interest. The amount to his credit on the 10th day of the second year is :
(A) Rs. 2460 (B) Rs. 2860 (C) Rs. 3071 (D) none of these.
23. The simple interest on a certain sum at 4% per annum for 2 years is Rs. 80. The compound interest on the same sum for the same period is :
(A) Rs. 91.60 (B) Rs. 81.60 (C) Rs. 71.60 (D) none of these.
24. A man borrows Rs. 2550 to be paid back with compound interest at the rate of 4% per annum by the end of 2 years in two equal yearly instalments. How much will each instalment be ?
(A) Rs. 1275 (B) Rs. 1283 (C) Rs. 1352 (D) Rs. 1377
25. A sum of money is put at compound interest for 2 years at 20% per annum. It would fetch Rs. 482 more, if the interests were payable half yearly than if it were payable yearly. Find the sum.
(A) Rs. 18000 (B) Rs. 19000 (C) Rs. 20000 (D) none of these.
26. Mr. Bhatia invested money in two schemes A and B offering compound interest @ 8% p.a. and 9% p.a. respectively. If the total amount of interest accrued through two schemes together in two years was Rs. 4818.30 and the total amount invested was Rs. 27,000, what was the amount invested in Schemes A ?
(A) Rs. 12,000 (B) Rs. 13,500 (C) Rs. 15,000 (D) none of these.
27. On what sum will the compound interest for 2.5 years at 10% amount to Rs. 6352.50 ?
(A) Rs. 7000 (B) Rs. 8000 (C) Rs. 5000 (D) none of these.
28. A money lender lends Rs. 2000 for 6 months at 20% per annum whereas the interest is compounded quarterly. After the given period he will get the amount of :
(A) Rs. 2205 (B) Rs. 2200 (C) Rs. 2160 (D) Rs. 2040

29. In how many years will a sum of Rs. 800 at 10% per annum compounded semi-annually become Rs. 926.10 ?
- (A) $1\frac{1}{3}$ (B) $1\frac{1}{2}$ (C) $2\frac{1}{3}$ (D) $2\frac{1}{2}$
30. The compound interest on Rs. 800 in 2 years and 6 months at 5% is :
- (A) Rs. 105.05 (B) Rs. 104.05 (C) Rs. 106.05 (D) None of these.
31. In how many years will a sum of money double itself at 12% per annum ?
- (A) 6 years 9 months (B) 7 years 6 months
(C) 8 years 3 months (D) 8 years 4 months
32. The compound interest on a certain sum of money at 4% per annum is Rs. 816. The corresponding simple interest is :
- (A) Rs. 800 (B) Rs. 900 (C) Rs. 1600 (D) None of these.
33. What sum will amount to Rs., 15916.59 in 3 years at compound interest, the interest for first, second and third year being 3, 2 and 1 per cent respectively ?
- (A) Rs. 18000 (B) Rs. 12000 (C) Rs. 15000 (D) none of these.
34. A person lent out a certain sum on simple interest and the same sum on compound interest at a certain rate of interest per annum. He noticed that the ratio between the difference of compound interest and simple interest of 3 years and that of 2 years is 25 : 8. The rate of interest per annum is :
- (A) 10% (B) 11% (C) 12% (D) 12.5%
35. Rs. 3757 is to be divided between A and B such that A's share at the end of 7 years may be equal to B's share at the end of 9 years. If rate per cent be 10% p.a. compound interest, B's share is :
- (A) Rs. 1700 (B) Rs. 1500 (C) Rs. 2057 (D) Rs. 1400
36. The compound interest on a certain sum of money for 2 years at 5% is Rs. 328. The simple interest on the same sum at same rate for same time is :
- (A) Rs. 418 (B) Rs. 375 (C) Rs. 320 (D) None of these.
37. At what rate per cent 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%
38. A sum of money placed at compound interest doubles itself in 5 years. It will amount to eight times itself at the same rate of interest in :
- (A) 7 years (B) 10 years (C) 15 years (D) 20 years
39. The least number of completed years in which a sum of money put out at 20% C.I. will be more than doubled is :
- (A) 3 (B) 4 (C) 5 (D) 6
40. The compound interest on Rs. 18,750 in 2 years, the rate of interest being 4% for the first year and 8% for the second year is :
- (A) Rs. 1670 (B) Rs. 1610 (C) Rs. 1760 (D) None of these.
41. Two friends A and B jointly lent out Rs. 81600 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) Rs. 30000 (B) Rs. 40000 (C) Rs. 45000 (D) Rs. 38000

42. What sum of money will bring Rs. 5044 as compound interest in 3 years at 5% p.a., the interest being compounded annually ?
(A) Rs. 30,000 (B) Rs. 33,000 (C) Rs. 32,000 (D) Rs. 40,000
43. What annual payment will discharge a debt of Rs. 1025 due in 2 years at the rate of 5% compound interest ?
(A) Rs. 550 (B) Rs. 551.25 (C) Rs. 560 (D) Rs. 560.75
44. A father divides his property between his two son A and B. A invests the amount at compound interest of 8% p.a. B invests the amount at 10% p.a. simple interest. At the end of 2 years, the interest received by B is Rs. 1336 more than the interest received by A. Find the share of A in the father's property of Rs. 25,000
(A) Rs. 12,000 (B) Rs. 13,000 (C) Rs. 12,500 (D) Rs. 10,000
45. Sanjay put equal amounts of money one at 10% p.a. compound interest payable half-yearly and other at r % p.a. compound interest payable yearly. If he gets equal amounts after 3 years, the value of r is :
(A) 10.25% (B) 9.5 % (C) 10% (D) None of these.
46. The time by which a sum of money would treble it self at 8% p.a. C.I is :
(A) 14.28 yrs. (B) 14 yrs. (C) 12 yrs. (D) None of these.
47. A sum of money amounts to Rs. 8464 in two years and Rs. 9733.60 in 3 years at compound interest, interest being compounded annually. What is the rate per cent ?
(A) 12% (B) 13% (C) 14% (D) 15%
48. A savings banks account pays 5% interest (per year) and it is compounded every six months. When a boy is 13 years old, Rs.100 is deposited to his credit in a savings bank account. How much is due to him when he is 21 years old ?
(A) Rs. 148.40 (B) Rs. 158.40 (C) Rs. 168.40 (D) Rs. 178.40
49. A certain sum put at compound interest amounts to Rs. 699.66 in 2 years. If the rate p.c. for the first year be 4% and 3.5% for the second year, the sum is :
(A) Rs. 650 (B) Rs. 625 (C) Rs. 599.25 (D) Rs. 602.27
50. The simple interest on a certain sum of money for 3 years at 8% per annum is half the compound interest on Rs. 4000 for 2 years at 10% per annum. The sum placed on simple interest is :
(A) Rs. 1550 (B) Rs. 1650 (C) Rs. 1750 (D) Rs. 2000
51. What is the compound interest on Rs. 4096 for 3 years at 6.5% p.a., compound annually ?
(A) Rs. 850 (B) Rs. 817 (C) Rs. 837 (D) Rs. 840
52. In how many years will an amount double itself at 5% interest compounded annually ?
(A) 15.2 yrs. (B) 14.2 yrs (C) 13.2 yrs (D) 16.2 yrs
53. Divide the sum of Rs. 3903 between A and B in such a manner that if both of them put their parts of money at 4% per annum compound interest, amount received by A after 7 years remains equal to the amount received by B after 9 years.
(A) Rs. 1875 (B) Rs. 1587 (C) Rs. 1785 (D) Rs. 1758
54. There is 60% increase in an amount in 6 years at simple interest. What will be the compound interest of Rs. 12,000 after 3 years at the same rate ?
(A) Rs. 2160 (B) Rs. 3120 (C) Rs. 3972 (D) Rs. 6240
55. The difference between the compound interest compounded annually and simple interest for 2 years at 20% p.a. is Rs. 144. Find the sum.
(A) Rs. 30,000 (B) Rs. 3,300 (C) Rs. 3,600. (D) Rs. 3,900

56. The difference between simple interest and compound interest on a certain sum of money at 5% per annum is Rs. 25. The sum is :
 (A) 5000 (B) 10,000 (C) 4000 (D) None of these.
57. The difference between the S.I. and the C.I. on Rs. 2400 for 2 years at 5% p.a. is :
 (A) Rs. 5 (B) Rs. 10 (C) Rs. 16 (D) None of these.
58. The difference of compound interest on Rs. 800 for 1 year at 20% per annum when compounded half yearly and quarterly is :
 (A) Rs. 4.40 (B) Nil (C) Rs. 6.40 (D) None of these.
59. The difference between compound interest and simple interest on Rs. 500 for 3 years at 5% per annum is :
 (A) Rs. 4.18 (B) Rs. 3.81 (C) Re. 1 (D) None of these.
60. If the first year's interest on a certain sum of money placed at 5% per annum compound interest is Rs. 1200, what will be the interest for the third year ?
 (A) Rs. 1220 (B) Rs. 1323 (C) Rs. 1423 (D) Rs. 1330
61. The difference between simple interest and compound interest on a certain sum for 2 years at 6% p.a. is Rs. $13/50$. The sum is :
 (A) Rs. 72.22 (B) Rs. 82.22 (C) Rs. 92.22 (D) Rs. 62.22
62. In how many years will a sum of money double itself at 5% p.a. compound interest ?
 (A) 15 years 3 months (B) 14 years 2 months
 (C) 14 years 3 months (D) 15 years 2 months
63. The difference between simple interest and compound interest for 3 years at 2.5% per annum is Rs. 625. The sum is :
 (A) Rs. 13,770 (B) Rs. 11,200 (C) Rs. 12,800 (D) None of these.
64. A tree increases annually by $1/8$ th of its height. By how much will it increase after 2 years, if it stands today 64 cm high ?
 (A) 72 cm (B) 74 cm (C) 75 cm (D) 81 cm
65. If a sum of money at simple interest doubles in 6 years, it will become 4 times in
 (A) 12 years (B) 14 years (C) 16 years (D) 18 years
66. Divide Rs. 1301 between A and B, so that after 7 years the amount of A is equal to the amount of B after 9 years, the interest being compounded at 4% per annum.
 (A) Rs. 676, Rs. 625 (B) Rs. 650, Rs. 651
 (C) Rs. 670, Rs. 631 (D) None of these.
67. A sum of money is borrowed and paid back in two annual instalments of Rs. 882 each allowing 5% compound interest. The sum borrowed was :
 (A) Rs. 1620 (B) Rs. 1640 (C) Rs. 1680 (D) Rs. 1700
68. Rs. 800 at 5% per annum compound interest amount to Rs. 882 in
 (A) 6 years (B) 2 years (C) 4 years (D) None of these.
69. If a sum on compound interest becomes three times in 4 years, then with the same interest rate, the sum will become 27 times in :
 (A) 8 years (B) 12 years (C) 24 years (D) 36 years
70. A man borrows a certain sum and pays it back in 2 years in two equal instalments. If the compound interest reckoned at 4% and if he pays back annually Rs. 676, then the borrowed sum is :
 (A) Rs. 1275 (B) Rs. 1078 (C) Rs. 1870 (D) None of these.

71. If a certain sum of money amounts to Rs. 800 for 2 years and Rs. 880 for 3 years then how much will it amount to in 4 years ?
(A) Rs. 920 (B) Rs. 968 (C) Rs. 898 (D) Rs. 1000
72. A certain sum of money at simple interest amounts to Rs. 1012 in 2.5 years and to Rs. 1067.20 in 4 years. The rate of interest per annum is :
(A) 2.5% (B) 3% (C) 4% (D) 5%
73. A sum of money is invested at compound interest payable annually. The interest in two successive years were Rs. 225 and Rs. 238.50. Then the rate per cent was :
(A) 4% (B) 5% (C) 6% (D) None of these
74. A man borrows Rs. 12,500 at 20% compound interest. At the end of every year he pays Rs. 2000 as part repayment. How much does he still owe after three such instalments ?
(A) Rs. 12,000 (B) Rs. 12,864 (C) Rs. 15,600 (D) None of these.
75. What sum of money will amount to Rs. 9261 in 1 year and 6 months at 10% p.a. compound interest being compounded semiannually ?
(A) Rs. 8,000 (B) Rs. 9,000 (C) Rs. 7,000 (D) Rs. 10,000
76. The compound interest on a sum of money for 3 years at 5% is Rs. 1324.05. What is the simple interest ?
(A) Rs. 1460 (B) Rs. 1365 (C) Rs. 1260 (D) None of these.
77. The simple interest on a certain sum for 3 years at 5 per cent per annum is less than the compound interest on the same sum for the same time by Rs. 61. The sum is :
(A) Rs. 8,000 (B) Rs. 11,200 (C) Rs. 10,000 (D) None of these.
78. The differences between compound interest and simple interest on a sum for 2 years at 10% per annum, when the interest is compounded annually is Rs. 16. If the interest were compounded half-yearly, the difference in two interests would be :
(A) Rs. 24.81 (B) Rs. 26.90 (C) Rs. 31.61 (D) Rs. 32.40
79. The difference between compound and simple interest at 5% per annum for 4 years on Rs. 2000 is :
(A) Rs. 310 (B) Rs. 277 (C) Rs. 300 (D) Rs. 260.
80. If the compound interest on a sum for 2 years at 12.5% per annum is Rs. 510, the simple interest on the same sum at the same rate for the same period of time is :
(A) Rs. 400 (B) Rs. 450 (C) Rs. 460 (D) Rs. 480
81. The difference between simple interest and compound interest at the same rate for Rs. 5000 for 2 years is Rs. 72. Then the rate of interest is :
(A) 13% (B) 12% (C) 14% (D) None of these.
82. The difference between S.I. and C.I. on a certain sum of money interested for 3 years at 6% p.a. is Rs. 110.16. The sum is :
(A) Rs. 3000 (B) Rs. 3700 (C) Rs. 12000 (D) Rs. 10000
83. On what sum of money will be the difference between simple interest and compound interest for 2 years at 4% per annum be equal to Rs. 50 ?
(A) Rs. 31250 (B) Rs. 20400 (C) Rs. 100000 (D) Rs. 25000
(E) none of these.
84. The difference between simple interest at 12% and compound interest at 12% compounded half yearly on a sum of Rs. 3000 in one year is :
(A) 9.60 (B) Rs. 10.80 (C) 11.20 (D) None of these.

85. On a sum of money, the simple interest for 2 years is Rs. 660, while the compound interest is Rs. 696.30, the rate of interest being the same in both the cases. The rate of interest is
 (A) 10% (B) 10.5% (C) 12% (D) None of these.
86. Johnson left Rs. 100000 with the direction that it should be divided in such a way that his minor sons Tom, Dick and Harry aged 9, 12 and 15 years should each receive equally after attaining the age 25 years. The rate of interest being 3.5%. How much each son receive after getting 25 years old?
 (A) Rs. 50000 (B) Rs. 51994 (C) Rs. 51894 (D) Rs. 51794
87. The compound interest on half-yearly on Rs. 10000, the rate for the first and second years being 6% and for the third year 9% p.a. is Rs. ...
 (A) Rs. 2286 (B) Rs. 2287 (C) Rs. 2285 (D) Rs. 2283
88. In how many years a sum of money treble at 5% p.a. compound interest payable on half-yearly rests?
 (A) 18 years 7 months (B) 18 years 6 months
 (C) 18 years 8 months (D) None of these.
89. If A = Rs. 10000, n = 18 yrs. R = 4% p.a. then the principal is :
 (A) Rs. 4000 (B) Rs. 4900 (C) Rs. 4500 (D) none of these.
90. The time of which a sum of money will be double at 5% p.a. C.I. is :
 (A) Rs. 10 years (B) 12 years (C) 14.2 years (D) None of these.
91. In how many years a sum of money will double itself at 12% p.a. compound interest.
 (A) 6.12 yrs. (B) 6.5 yrs. (C) 7.12 yrs. (D) None of these.

ANSWERS

- | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. A. | 2. B. | 3. C. | 4. C. | 5. B. | 6. A. | 7. C. | 8. C. |
| 9. C. | 10. A. | 11. B. | 12. D. | 13. A. | 14. A. | 15. A. | 16. A. |
| 17. A. | 18. A. | 19. B. | 20. D. | 21. B. | 22. A. | 23. B. | 24. C. |
| 25. C. | 26. A. | 27. C. | 28. A. | 29. B. | 30. B. | 31. D. | 32. A. |
| 33. C. | 34. D. | 35. A. | 36. C. | 37. D. | 38. C. | 39. B. | 40. B. |
| 41. B. | 42. C. | 43. B. | 44. B. | 45. A. | 46. A. | 47. D. | 48. A. |
| 49. A. | 50. C. | 51. A. | 52. B. | 53. A. | 54. C. | 55. C. | 56. B. |
| 57. D. | 58. A. | 59. B. | 60. B. | 61. A. | 62. B. | 63. C. | 64. D. |
| 65. D. | 66. A. | 67. B. | 68. B. | 69. B. | 70. A. | 71. B. | 72. C. |
| 73. A. | 74. D. | 75. A. | 76. C. | 77. A. | 78. A. | 79. D. | 80. D. |
| 81. B. | 82. D. | 83. A. | 84. B. | 85. D. | 86. C. | 87. A. | 88. A. |
| 89. D. | 90. C. | 91. A. | | | | | |

Example 35. A Maruti Zen costs Rs. 3,60,000. Its price depreciates at the rate of 10% a year during first 2 years and at the rate of 20% in third year. What will be the price of the car after 3 years? Also find the total depreciation.

Solution: Cost of Zen Car : $V = \text{Rs. } 3,60,000$

Rate of depreciation in first two years (R_1) = 10%; Rate of depreciation in third year (R_2) = 20%

$$\begin{aligned} \text{Price of Car after 3 years} &= V \times \left(1 - \frac{R_1}{100}\right)^2 \times \left(1 - \frac{R_2}{100}\right) \\ &= \text{Rs. } \left[3,60,000 \times \left(1 - \frac{10}{100}\right)^2 \times \left(1 - \frac{20}{100}\right)\right] = \text{Rs. } \left[3,60,000 \times \frac{9}{10} \times \frac{9}{10} \times \frac{4}{5}\right] \\ &= \text{Rs. } 2,33,280. \end{aligned}$$

Hence the cost of car after 3 years = Rs. 2,33,280.

Total depreciation = Rs. (3,60,000 - 2,33,280) = Rs. 1,26,720.

EXERCISE - 4.3

MULTIPLE CHOICE QUESTION

Select the correct option out of the given ones:

- The effective rate of interest corresponding a nominal rate of 7% p.a. convertible quarterly is :
(A) 7% (B) 7.5% (C) 7.10% (D) none of these.
- The effective annual rate of interest corresponding to a nominal rate of 6% per annum payable half-yearly is :
(A) 6.06% (B) 6.07% (C) 6.08% (D) 6.09%
- The effective rate equivalent to nominal rate of 6% compounded monthly is :
(A) 6.05 (B) 6.16 (C) 6.26 (D) 6.07.
- How many years will it take for money to double at the effective rate of 8% ?
(A) 9.01 years (B) 9.1 years (C) 9.03 years (D) 9.04 years
- Find the rate of interest corresponding to the effective rate of 6%.
(A) 5.62% (B) 5.72% (C) 5.82% (D) 5.92%
- A money-lender charges 'interest' at the rate of 10 paise per rupee per month, payable in advance. What effective rate of interest does he charge per annum ?
(A) 254.5% (B) 25.45% (C) 26.45% (D) 264.5%
- The effective rate equivalent nominal rate 7% converted monthly is :
(A) 7.4% (B) 7.04% (C) 7.6% (D) 7.06%
- If the population of a town increases every year by 2% of that population at the beginning of that year, in how many years will the total increase of population be 40%?
(A) 15 yrs. (B) 16 yrs. (C) 17 yrs. (D) 18 yrs.
- The population of a state increases every year by 2.6% of the population at the beginning of that year. In what time will the population double itself ?
(A) 27 yrs. (B) 20 yrs. (C) 30 yrs. (D) 29 yrs.
- The present population of a town is 140000. What will be the population after 2 years if it increases 5% annually ?
(A) 1,54,400 (B) 1,50,400 (C) 1,65,400 (D) none of these.

11. The population of a town in the year 2002 was 270400. If the rate of increase is 45 per thousand of the population, find the population in the year 2000.
 (A) 2,57,400 (B) 2,47,400 (C) 2,37,400 (D) 2,27,400.
12. The bacteria in a culture grow by 8% in the first hour, decreases by 8% in the second hour and again increases by 7% in the third hour. If at the end of third hour the count of bacteria is 12170000, find the original count of bacteria in the sample.
 (A) 11450000 (B) 11550000 (C) 11540000 (D) 11350000.
13. A machine is depreciated at the rate of 10% on reducing balance. The original cost was Rs. 10,000 and the ultimate scrap value was Rs. 3750. Find the effective life of the machine.
 (A) 9 yrs. (B) 8 yrs. (C) 7 yrs. (D) 10 yrs.
14. A manufacturing concern writes off depreciation, at the rate of 5% every year of its plant and machinery, the original cost of which is Rs. 30,000. Find the depreciated value at the end of 10 years.
 (A) Rs. 17950 (B) Rs. 17850 (C) Rs. 17750 (D) Rs. 17975
15. Rs. 5000 is invested in a Term Deposit Scheme that fetches interest 6% per annum compounded quarterly. What is effective rate of interest ?
 (A) 6.13% (B) 6.23% (C) 6.03% (D) 5.13%
16. At what nominal rate compounded monthly will Rs. 2000 amount to Rs. 2500 in 5 years ?
 (A) 4.5% (B) 4.47% (C) 4.37% (D) 4.27%
17. Which is better investment : 4% per annum compounded quarterly or 4.1% per annum simple interest.
 (A) at 4% p.a (B) 4.1% S.I. (C) data Inadequate (D) none of these

ANSWERS

1. D. 2. D. 3. B. 4. A. 5. C. 6. A. 7. A. 8. C.
 9. A. 10. A. 11. B. 12. A. 13. A. 14. A. 15. A. 16. B.
 17. B.

QUESTION BANK – 4(C)

MULTIPLE CHOICE QUESTIONS

Select the correct option out of the given ones :

1. What effective rate of interest per annum does a person get who is paid at the rate of 10% p.a. interest payable half yearly ?

(A) 11%

(B) 10.75%

(C) 10.5%

(D) 10.25%

2. A machine depreciates at 10% of its value at the beginning of a year. The cost and scrap value realized at the time of sale being Rs. 23240 and Rs. 9000 respectively. For how many years the machine was put to use ?
 (A) 7 years (B) 8 years (C) 9 year (D) 10 years
3. The population of town increases annually by 25%. If the present population is one crore, then what is the difference between the population 3 years ago and 2 years ago ?
 (A) 25,00,000 (B) 12,80,000 (C) 15,60,000 (D) none of these.
4. The bacteria in a culture grows by 7% in the first hour, decreases by 6% in the second hour and again increases by 5% in the third hour. If at the end of third hour the count of bacteria is 11270000, find the original count of bacteria in the sample.
 (A) 11450000 (B) 10670000 (C) 11670000 (D) 11540000
5. The population of a town at the beginning of the year 2001 was 265000. If the rate of increases be 52 per thousand of the population. Find the population at the beginning of the year 2006.
 (A) 341400 (B) 340400 (C) 345400 (D) 351400.
6. The population of a town was 208000 in 2000. In 2001 the population increased by 8% and in 2002, it decreased by 8%. Find its population at the end of the year 2002.
 (A) 207600 (B) 206600 (C) 208660 (D) none of these.
7. A machine purchased for Rs. 10,000 depreciates at the rate of 6% per annum, the depreciation being worked out on the value of the machine at the beginning of the year. Use log tables to obtain its depreciated value after 7 years. (Given $\log 6 = 0.77815$, $\log 9.4 = 0.97313$, $\log 64.85 = 1.811920$).
 (A) Rs. 6582 (B) Rs. 6682 (C) Rs. 6782 (D) none of these.
8. The value of a machinery depreciates every year by 20%. What would be the value of the machinery bought for Rs. 6250 at the end of 3 years ?
 (A) Rs. 3300 (B) Rs. 3250 (C) Rs. 3200 (D) Rs. 3150
9. The population of a town increased by 4% in the first year and diminished by 4% in the second year. If the population of the town at the end of the second year is 499200, find the population of the town at the beginning of the first year.
 (A) Rs. 500000 (B) Rs. 500100 (C) Rs. 510000 (D) none of these.
10. A machine depreciates in value each year at 10% of its previous value and at the end of 4th year its value is Rs. 1,31,220. Find the original value.
 (A) Rs. 2,00,000 (B) Rs. 2,02,000 (C) Rs. 2,01,000 (D) Rs. 2,03,000
11. A machine worth of Rs. 12000 is depreciated at the rate of 10% a year. It was sold eventually as waste metal for Rs. 200. The number of years during which the machine was in use is :
 (A) 38.5 yrs. (B) 38.6 yrs. (C) 38.7 yrs. (D) 38.8 yrs.
12. A new car costs Rs. 90000. Its price depreciates at the rate of 5% a year during the first 2 years and at the rate of 10% a year thereafter. The price of the car after 10 years is :
 (A) Rs. 33940 (B) Rs. 33960 (C) Rs. 34940 (D) Rs. 34960
13. In the 1991 census the population of India was found to be 6.7×10^7 . If the population increases at the rate of 2.5% every year, what would be the population in 2001 ?
 (A) 8.472×10^8 (B) 8.572×10^8 (C) 8.672×10^8 (D) none of these.

14. A machine, the life of which is estimated to be 10 years, costs Rs. 10000. Calculate its scrap value at the end of its life, depreciation being 10% per annum.
 (A) Rs. 3483 (B) Rs. 3583 (C) Rs. 3683 (D) Rs. 3783
15. The bacteria in a culture grows by 10% in the first hour, decreases by 10% in the second hour and again increases by 10% in the third hour. If at the end of third hour, the count of bacteria is 131900000, find the original count of bacteria in the sample.
 (A) 121300000 (B) 121100000 (C) 121200000 (D) none of these.
16. A machine worth Rs. 490740 is depreciated at 15% of its opening value each year. When its value would reduce to Rs. 200000 ?
 (A) 4 years 6 months (B) 4 years 7 months (C) 4 years 5 months (D) none of these.
17. The annual birth and death rates per 1000 are 39.4 and 19.4 respectively. The number of years in which the population will be doubled assuming there is no immigration or emigration is :
 (A) 30 yrs. (B) 35 yrs. (C) 25 yrs. (D) none of these.
18. A machine, the useful time of which, is estimated to be 10 years costs Rs. 10000. Rate of depreciation is 10% p.a. The scrap value at the end of its life is :
 (A) Rs. 3480 (B) Rs. 4383 (C) Rs. 3483 (D) none of these.
19. A machine is depreciated the rate of 20% on reducing balance. The original cost of the machine was Rs. 100000 and its ultimate scrap value was Rs. 30000. The effective life of the machine is
 (A) 5.4 years (appx.) (B) 4.5 years (appx.) (C) 5 years (appx.) (D) none of these.
20. The effective rate of interest corresponding to a nominal rate 3% p.a payable half yearly is :
 (A) 3.2% p.a (B) 3.25% p.a (C) 3.0225% p.a (D) none of these.
21. What effective rate is equivalent to the nominal rate of 5% compound continuously ?
 (A) 5.2% (B) 5.02% (C) 5.5% (D) 5.12%
22. The population of a town increases every year by 2% of the population at the beginning of that year. The number of years by which the total increases of population be 40% is :
 (A) 17 years (B) 10 years (C) 7 years (app.) (D) none of these.

ANSWERS

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|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. D. | 2. C. | 3. B. | 4. B. | 5. A. | 6. B. | 7. D. | 8. C. |
| 9. A. | 10. A. | 11. D. | 12. C. | 13. B. | 14. A. | 15. C. | 16. A. |
| 17. B. | 18. C. | 19. A. | 20. C. | 21. A. | 22. A. | | |

EXERCISE – 4.4

MULTIPLE CHOICE QUESTIONS

Select the correct option out of the given ones :

1. The present value Rs. 10000 due in 2 years at 5% p.a. compound interest when the interest is paid on yearly basis is :
(A) Rs. 9070 (B) Rs. 9069 (C) Rs. 9061 (D) Rs. 9060
2. Find the future value of an annuity of Rs. 500 is made annually for 7 years at interest rate of 14% compounded annually. [Given that $(1.14)^7 = 2.5023$.]
(A) Rs. 5365.36 (B) Rs. 5265.36 (C) Rs. 5465.36 (D) none of these.
3. Rs. 200 is invested at the end of each month in an account paying interest of 6% per year compounded monthly. What is the future value of the annuity after 10th payment?
[Given that $(1.005)^{10} = 1.0511$]
(A) R. 2144 (B) Rs. 2044. (C) Rs. 1944 (D) Rs. 2244
4. Find the present value of Rs. 10000 to be required after 5 years if the interest rate be 9%.
[Given that $(1.09)^5 = 1.5386$]
(A) Rs. 6499.621 (B) Rs. 6499.52 (C) Rs. 6499.42 (D) Rs. 6599.
5. The present value of Rs. 10000 due in 2 years at 5% p.a. compound interest when the interest is paid on half-yearly basis is :
(A) Rs. 9070.50 (B) Rs. 9069.50 (C) Rs. 9061.50 (D) Rs. 9059.50
6. The amount of an annuity certain of Rs. 150 for 12 years at 3.5% p.a. C.I. is :
[Given $(1.035)^{12} = 1.5110$]
(A) Rs. 2190.380 (B) Rs. 1290.380 (C) Rs. 2180.380 (D) none of these.
7. The present value of an annuity of Rs. 3000 for 15 years at 4.5% p.a. C.I. is :
[Given $(1.045)^{15} = 0.51672$]
(A) Rs. 23809.67 (B) Rs. 32218.67 (C) Rs. 32908.67 (D) none of these.

8. If the amount of an annuity for 25 years at 5% p.a. C.I. is Rs. 50000 the annuity will be
[Given $(1.05)^{25} = 3.38635$]
(A) Rs. 1447.62 (B) Rs. 1047.62 (C) Rs. 1146.62 (D) none of these.
9. A person invests Rs. 500 at the end of each year with a bank which pays interest at 10% p.a. C.I. annually. The amount standing to his credit one year after he has made his yearly investment for the 12th time is :
(A) Rs. 11764.50 (B) Rs. 10000 (C) Rs. 12000 (D) none of these.
10. Vipul purchases a car for Rs. 550000. He gets a loan of Rs. 500000 at 15% p.a. from a Bank and balance 50000 he pays at the time of purchase. He has to pay whole amount of loan in 12 equal monthly instalments with interest starting from the end of the first month. The money he has to pay at the end of every month is : [Given $(1.0125)^{12} = 1.16075452$]
(A) Rs. 45130.43 (B) Rs. 45230.43 (C) Rs. 45330.43 (D) none of these.
11. Anshul borrow Rs. 600000 to buy a house. If he pays equal instalments for 20 years and 10% interest on outstanding balance what will be the equal annual instalment ?
[Given $P(20, 0.10) = 8.51356$]
(A) Rs. 70475.80 (B) Rs. 58729.80 (C) Rs. 68729.80 (D) none of these.
12. Rs. 5000 is paid every year for ten years to pay off a loan. What is the loan amount if interest rate be 14% per annum compounded annually ? [Given $P(10, 0.14) = 5.21611$]
(A) Rs. 26080.55 (B) Rs. 26085.50 (C) Rs. 26185.50 (D) none of these.
13. Ramesh bought a T.V. costing Rs. 13000 by making a down payment of Rs. 3000 and agreeing to make equal annual payment for four years. How much would be each payment if the interest on unpaid amount be 14% compounded annually ? [Given $P(4, 0.14) = 2.91371$]
(A) Rs. 3435.05 (B) Rs. 3432.05 (C) Rs. 3442.05 (D) Rs. 3532.05
14. How much amount is required to be invested every year so as to accumulated Rs. 300000 at the end of 10 years if interest is compounded annually at 10% ?
[Given $P(10, 0.1) = 15.9374248$]
(A) Rs. 18823.6 (B) Rs. 18833.6 (C) Rs. 18843.6 (D) none of these.
15. A company establishes a sinking fund to provide for the payment of Rs. 2,00,000 debt maturing in 20 years. Contributions to the fund are to be made at the end of every year. Find the amount of each annual deposit if interest is 5% per annum.
(A) Rs. 6142 (B) Rs. 6042 (C) Rs. 6052 (D) Rs. 6152
16. If you will need Rs. 20,000 for your children's education, how much should you set a side each quarter for 10 years to accumulate this amount at the rate of 6% compounded quarterly ?
(A) Rs. 373.60 (B) Rs. 375.60 (C) Rs. 383.60 (D) Rs. 363.60.
17. Find the present value of an annuity of Rs. 2500 payable at the end of each 6 months for 5 years, if the money is worth 10% converted semi-annually.
(A) Rs. 19510 (B) Rs. 19410 (C) Rs. 19310 (D) none of these.
18. A man borrows Rs. 20000 and agrees to pay the borrowed amount in 10 equal instalments at the rate of 6% per annum. Find the amount of each instalment, the first being paid one year after the money was borrowed.
(A) Rs. 2717.35 (B) Rs. 2727.35 (C) Rs. 2737.35 (D) none of these.
19. A automobile advertisement reads: "No money down, Rs. 10,000 per month for 36 months; interest rate equals 12% per year compounded monthly on the unpaid balance". How much of the Rs. 3,60,000 to be paid will go for interest and how much for the car itself ?
(A) Rs. 61000 (B) Rs. 60100 (C) Rs. 60200 (D) none of these.

20. A company may obtain a machine either by leasing it for 5 years (useful life) at annual rent of Rs. 2,000 or by purchasing the machine for Rs. 8,100. If the company can borrow money at 18% per annum, which alternative is preferable ?
 (A) Rs. 7985.42 (B) Rs. 7975.42 (C) Rs. 7965.42 (D) none of these.
21. Invests Rs. 10000 every year starting from today for next 10 years. Suppose interest rate is 8% per annum compounded annually. Calculate future value of the annuity.
 [Given that $(1 + 0.08)^{10} = 2.15892500$.]
 (A) Rs. 156454.88 (B) Rs. 156457.88 (C) Rs. 156554.88 (D) none of these.
22. Given annuity of Rs. 100 amounts to Rs. 3137.12 at 4.5% p.a. C.I. The number of years will be :
 (A) 25 yrs. (appx.) (B) 20 yrs. (appx.) (C) 22 yrs. (D) none of these.
23. Raja aged 40 wishes his wife Rani to have Rs. 40 lakhs at his death. If his expectation of life is another 30 years and he starts making equal annual investments commencing now at 3% compound interest p.a. how much should he invest annuity ?
 (A) Rs. 84077 (B) Rs. 84150 (C) Rs. 84449 (D) Rs. 84247

ANSWERS

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|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. A. | 2. A. | 3. B. | 4. C. | 5. D. | 6. A. | 7. B. | 8. B. |
| 9. A. | 10. A. | 11. A. | 12. A. | 13. B. | 14. A. | 15. B. | 16. A. |
| 17. C. | 18. A. | 19. B. | 20. A. | 21. A. | 22. B. | 23. A. | |

QUESTION BANK – 4(D)

MULTIPLE CHOICE QUESTION

Select the correct option out of the given ones :

1. Find the amount of an annuity if payment of Rs. 7000 is made annually for 7 years at interest rate of 6% compounded annually.
(A) Rs. 50300 (B) Rs. 51300 (C) Rs. 50250 (D) Rs. 50350
2. The present value of an annuity for Rs. 80 a years for 20 years at 5% p.a is :
(A) Rs. 997 (appx.) (B) Rs. 900 (C) Rs. 1000 (D) none of these.
3. Find the amount of an annuity of Rs. 2000 payable of the end of each year for 5 years if the money is worth 8% effective.
(A) Rs. 11733.20 (B) Rs. 11633.20 (C) Rs. 11733.20 (D) none of these.
4. A loan of Rs. 10,000 is to be paid back in 30 equal instalments. The amount of each instalment to cover the principal at 4% p.a C.I. is :
(A) Rs. 587.87 (B) Rs. 587 (C) Rs. 578.87 (D) none of these.
5. Find the amount of an annuity of Rs. 800 payable at the end of each 3 months for 6 years if the money is worth 6% compounded quarterly.
(A) Rs. 22906.82 (B) Rs. 22916.82 (C) Rs. 22806.82 (D) none of these.
6. A person desires to create a fund to be invested at 10% C.I. per annum to provide for a prize of Rs. 300 every year. Using $V = a/i$. Find V and V will be :
(A) Rs. 2000 (B) Rs. 2500 (C) Rs. 3000 (D) none of these.

7. If a person wants to accumulate Rs. 50,000 by making equal payments at the end of each quarter for the next 5 years. What will be the size of these investments if money is worth 6% converted quarterly ?
 (A) Rs. 2162.28 (B) Rs. 2172.28 (C) Rs. 2182.28 (D) none of these.
8. A machine costs a company Rs. 80,000 and its effective life is estimated to be 20 years. A sinking fund is created for replacing the machine at the end of its effective life when its scrap realises a sum of Rs. 5000 only. Calculate the amount which should be provided every year, for the sinking fund if it accumulate at 9% per annum compounded continuously.
 (A) Rs. 1363.73 (B) Rs. 1366.73 (C) Rs. 1353.36 (D) Rs. 1343.36
9. A person bought a house paying Rs. 20000 cash down and Rs. 4000 at the end of each year for 25 years at 5% p.a. C.I. The cash down price is :
 (A) Rs. 75000 (B) Rs. 76000 (C) Rs. 76392 (D) none of these.
10. A machine costs a company Rs. 1,00,000 and its effective life is estimated to be 20 years. If the scrap is expected to realise Rs. 5000 only, find the sum to be invested every year at 5% per annum compound interest for 20 years to replace it by the machine which is expected to cost then 25% more over its present cost. Assume that the proceeds from the sale of scrap would be utilised for meeting the cost of the machine.
 (A) Rs. 3629.11 (B) Rs. 3639.11 (C) 3529.11 (D) Rs. 3739.11.
11. Mr. Anil plans to send his son for higher studies abroad after 10 years. He expected the costs of these studies to be Rs. 1,00,000. How much he set aside at the end of each year for 10 years to accumulate this amount if interest rate is 12% effective ?
 (A) Rs. 5701.25 (B) Rs. 5710.25 (C) Rs. 5705.25 (D) Rs. 5750.25
12. How much money must be deposited at the end of each year if the objective is to accumulate Rs. 20,000 by the time of eighth deposit ? Assume interest is earned at the rate of 10% per year compounded annually. How much interest will be earned on the deposits ?
 (A) Rs. 1748.88 (B) Rs. 1758.88 (C) Rs. 1768.88 (D) none of these.
13. Kapil Borrows Rs. 5,00,00 to buy a car. If he pays equal instalment for 20 years at 10% interest on out standing balance. What will be the equal annual instalment.
 [Given $P(20, 0.10) = 8.51356$]
 (A) Rs. 58729.84 (B) Rs. 58749.84 (C) Rs. 58759.84 (D) none of these.
14. A sinking fund is created for the redemption of debenture of Rs. 1,00,000 at the end of 20 years. How much money should be provided out of profits each year for the sinking fund if the investment can earn interest 9% per annum compounded continuously ?
 (A) Rs. 1782.50 (B) Rs. 1785.50 (C) Rs. 1786.50 (D) Rs. 1787.
15. A man purchased a house valued at Rs. 3,00,000. He paid Rs. 200000 at the time of purchase and agreed to pay the balance with interest at 12% per annum compounded half yearly in 20 equal half yearly instalments. If the first instalment is paid after six months from the date of purchase then the amount of each instalment is
 [Given $\log 10.6 = 1.0253$ and $\log 31.19 = 1.494$]
 (A) Rs. 8719.66 (B) Rs. 8769.21 (C) Rs. 7893.13 (D) none of these.
16. Find the present value of an annuity of Rs. 500 payable at the end of each 6 months for 3 year, if the money is worth 4% converted semi-annually.
 (A) Rs. 2800.71 (B) Rs. 2810.71 (C) Rs. 2809.71 (D) none of these.
17. Find the present value of an ordinary annuity of 24 payments of Rs. 700 each made monthly and earning interest at 9% per year compounded monthly.
 (A) Rs. 15322.40 (B) Rs. 15333.40 (C) Rs. 15422.40 (D) none of these.

18. A fixed royalty of Rs. 15,000 per annum for 20 years is granted to the author of some text book by a publisher. The right of receiving the royalty is put up for auction after 12 years have already passed. Find the price at which it may be sold, assuming the money is worth 8% per annum compounded continuously.
(A) Rs 88633.12 (B) Rs 88644.12 (C) Rs 88733.12 (D) none of these.
19. A equipment is purchased on an instalment basis such that Rs. 5000 is to be paid on the signing of the contract and four yearly instalments of Rs. 3000 each payable at the end of the first, second, third and fourth year. If the interest is charged at 5% per annum, what would be the cash down price?
(A) Rs 15637.85 (B) Rs 15737.85 (C) Rs 15837.85 (D) none of these.
20. A purchased a television paying Rs. 5000 down and promising to pay Rs. 200 every three months for next 4 years. The seller charges interest at 8% per annum compound quarterly. What is the cash price of television?
(A) Rs 7725.54 (B) Rs 7715.54 (C) Rs 7735.54 (D) none of these.
21. The present value of annuity of Rs. 5000 per annum for 12 years at 4% p.a C.I. annually is :
(A) Rs. 46000 (B) Rs. 46850 (C) Rs. 15000 (D) none of these.
22. Mr. Ravi borrows Rs. 20000 on condition to repay it with C.I. at 5% p.a. in annual instalments of Rs. 2000 each. The number of years for the debt to be paid off is :
(A) 10 years (B) 12 years (C) 11 years (D) none of these.
23. A company borrows Rs. 10000 on condition to repay it with compound interest at 5% p.a by annual instalment of Rs. 1000 each. The number of years by which the debt will be clear is :
(A) 14.2 years (B) 10 years (C) 12 years (D) none of these.
24. Appu retires at 60 years receiving a pension of 14400 a year paid in half-yearly instalments for rest of his life after reckoning his life expectation to be 13 years and that interest at 4% p.a. is payable half-yearly. What single sum is equivalent to his pension?
(A) Rs 145000 (B) Rs 144900 (C) Rs 144800 (D) Rs 144700
25. A machine worth Rs. 490740 is depreciated at 15% of its opening value each year. When its value would reduce by 90%?
(A) 11 years 6 months (B) 11 years 7 months
(C) 11 years 8 months (D) none of these
26. A sinking fund is created for redeeming debentures worth Rs. 5 lakhs at the end of 25 years. How much provision needs to be made out of profits each year provided sinking fund investments can earn interest at 4% p.a. ?
(A) Rs 12041 (B) Rs 12040 (C) Rs 12039 (D) Rs 12035
27. A machine costs of Rs. 520000 with an estimated life of 25 years. A sinking fund is created to replace it by a new model at 25% higher cost after 25 years with a scrap value realization of Rs. 25000, what amount should set aside every year if the sinking fund investment accumulate at 3.5% compound interest p.a. ?
(A) 16000 (B) 16500 (C) 16050 (D) 16005
28. Alibaba borrow Rs. 6 lakhs Housing Loan at 6% repayable in 20 annual instalments commencing at the end of the first year. How much annual payment is necessary.
(A) Rs 52420 (B) Rs 52419 (C) Rs 52319 (D) Rs 52320

ANSWERS

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|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. A. | 2. A. | 3. A. | 4. C. | 5. A. | 6. C. | 7. A. | 8. B. |
| 9. C. | 10. A. | 11. A. | 12. A. | 13. A. | 14. A. | 15. A. | 16. A. |
| 17. A. | 18. A. | 19. A. | 20. B. | 21. D. | 22. D. | 23. A. | 24. C. |
| 25. B. | 26. A. | 27. C. | 28. C. | | | | |