1. $8:125 =$

(a) 3.2% (b) 6.4% (c) 12.5% (d) 40%

2. If $x\%$ of 420 is 147, then the value of x is

(a) 25 (b) 35 (c) 45 (d) 40

3. If the number of soldiers in a base camp of 960 members increases by 15%, then the increase in number of soldiers is

(a) 1104 (b) 120 (c) 1080 (d) 144

4. If the price of a bike came down from ₹ 72000 to ₹ 68000, the percent by which the price of bike came down is

(a) $4\frac{4}{9}\%$ (b) $5\frac{5}{9}\%$ (c) $6\frac{1}{3}\%$ (d) $5\frac{15}{17}\%$

5. The number of mango trees in an orchard is 10.5% less than that of apple trees. Find the number of apple trees, if there are 1074 mango trees.

(a) 1000 (b) 1050 (c) 961 (d) 1200

6. The price of petrol is increased by 4% from ₹ 72per litre. The present cost of 5 litre of petrol is

(a) ₹ 74.80 (b) ₹ 374.40 (c) ₹ 434.88 (d) ₹ 360

7. The price of a refrigerator becomes ₹ 17641.20 from ₹ 14640due to transportation charges. Find the percentage increase in the price of refrigerator.

(a) $10\frac{1}{4}\%$ (b) 12.2% (c) 20.5% (d) $12\frac{1}{2}8$

8. The S.P. of an article is $1\frac{24}{25}$ times its C.P., then S.P. is_____ than C.P..

(a) 96% less (b) 24% more (c) 96% more (d) 24% less

9. A grocer marks the price of sugar 16% above the cost he bought. Find the price at which he marks $5kg$ of sugar, if he pays ₹ 48 for $1kg$ sugar.

(a) ₹ 252.20 (b) ₹ 261 (c) ₹ 240 (d) ₹ 278.40

10. If Joy bought a T–shirt worth ₹ 1420 with a discount of 25%, then the price at which he bought the T–shirt was

(a) ₹ 1065 (b) ₹ 1080 (c) ₹ 1454 (d) None of these

11. If 12% discount on an article reduce the price by 132, then the marked price of the article is

(a) ₹ 1320 (b) ₹ 1200 (c) ₹ 1100 (d) ₹ 1230

12. Overhead expenses is included with which of the following?

(a) C.P. (b) S.P. (c) M.P. (d) Discount

13. By selling an article at ₹ 5074, a profit of 18% is made. The cost at which the article was bought is

(a) ₹ 1180 (b) ₹ 3000 (c) ₹ 4300 (d) ₹ 3400

14. On selling a bag for ₹ 230.40, Ramu loses 10%. The price at which he must sell the bag to gain 5% is

(a) ₹ 268.80 (b) ₹ 256 (c) ₹ 243.20 (d) None of these

15. Ram bought a T.V. for ₹ 27000 and spent ₹ 3000 on its repair before selling it again for ₹ 33000. Find his profit or loss percent.

(a) 14% (b) 8% (c) 10% (d) 25%

16. The sales tax of 4 % on a book is ₹ 30.40. The selling price of the book is

(a) ₹ 760 (b) ₹ 760.40 (c) ₹ 729.60 (d) ₹ 790.40

17. A vendor bought 100 shirts of worth ₹ 1125 each and pays a VAT of 3% . The total amount he/she paid as VAT is

(a) ₹ 375 (b) ₹ 33.75 (c) ₹ 3375 (d) ₹ 337.50

18. Which of the following changes every year while interest is compounded annually?

(a) Principal (b) Rate of interest (c) Time period (d) All of these

19. If Principal =₹ 4000 , Time $= 2$ years, Rate $= 4\%$ p.a. compounded annually, then find amount.

(a) ₹ 4160 (b) ₹ 4326.40 (c) ₹ 4320 (d) ₹ 4499.46

20. If Principal =₹ 6000, Time $= 3$ years, Rate $= 5\%$ p.a., then find compound interest.

(a) ₹ 6300 (b) ₹ 6900 (c) ₹ 945.75 (d) ₹ 645.75

21. At what rate percent per annum, will a sum of ₹ 4000 yield a compound interest of ₹ 410in 2 years?

(a) 7% (b) 3% (c) 10% (d) 5%

22. When principal, P is compounded semi annually at rate $R\%$ per annum for 2 years, then amount, $A =$

(a) $p\left(1+\frac{R}{100}\right)^4$ (b) $p\left(1+\frac{R}{200}\right)^2$ (c) $P\left(1+\frac{R}{200}\right)^4$ (d) $P\left(1+\frac{R}{100}\right)^2$

23. Find the compound interest on ₹ 20000 at 20% p.a. for 2 years, if the interest is compounded semi annually.

(a) ₹ 9288 (b) ₹ 8922 (c) ₹ 9828 (d) ₹ 9282

24. What is the difference between the compound interest incurred when ₹ 10000 is borrowed for 2 years at 20% compounded annually and semi annually?

(a) ₹ 400 (b) ₹ 241 (c) ₹ 420 (d) ₹ 641

25. Find the initial salary of Shyam, if his salary becomes ₹ 49001.72 by increasing 7% for 3 years.

(a) ₹ 45000 (b) ₹ 40000 (c) ₹ 42000 (d) ₹ 48000

26. A scooter was bought for ₹ 42000. Its value depreciates at the rate of 5% per annum. After how many years its value will depreciate to ₹ 37905 ?

(a) 2 (b) 3 (c) 1 (d) none of these

27. Suppose a certain sum doubles in 2 years at $r\%$ rate of simple interest per annum or at $R\%$ rate of interest per annum compounded annually. We have

(a) $r < R$ (b) $R < r$ (c) $R = r$ (d) can't be decided

28. If marked price of an article is ₹ 1,200 and the discount is 12% , then the selling price of the article is

(a) ₹ 1,056 (c) ₹ 1,212 (b) ₹ 1,344 (d) ₹ 1,188

29. To gain 25% after allowing a discount of 10%, the shopkeeper must mark the price of the article which costs him ₹ 360 as

(a) ₹ 500 (b) ₹ 450 (c) ₹ 460 (d) ₹ 486

30. If $a\%$ is the discount percent on a marked price x, then discount is

(a) $\frac{x}{a}\times 100$ (b) $\frac{a}{x}\times 100$ (c) $x\times\frac{a}{100}$ (d) $\frac{100}{x\times a}$

31. For calculation of interest compounded half yearly, keeping the principal same, which one of the following is true?

(a) Double the given annual rate and half the given number of years.

(b) Double the given annual rate as well as the given number of years.

(c) Half the given annual rate as well as the given number of years.

(d) Half the given annual rate and double the given number of years.

32. Shyama purchases a scooter costing ₹ 36,450 and the rate of sales tax is 9%, then the total amount paid by her is

(a) ₹ 36,490.50 (b) ₹ 39,730.50 (c) ₹ 36,454.50 (d) ₹ 33,169.50

33. A bought a tape recorder for ₹ 8,000 and sold it to B. B in turn sold it to C, each earning a profit of 20%. Which of the following is true?

(a) A and B earn the same profit. (b) A earns more profit than B.

(c) A earns less profit than B. (d) Cannot be decided.

34. Latika bought a teapot for ₹ 120 and a set of cups for ₹ 400. She sold teapot at a profit of 5% and cups at a loss of 5%. The amount received by her is

(a) ₹ 494 (b) ₹ 546 (c) ₹ 506 (d) ₹ 534

35. A jacket was sold for ₹ 1,120 after allowing a discount of 20%. The marked price of the jacket is

(a) ₹ 1440 (b) ₹ 1400 (c) ₹ 960 (d) ₹ 866.66

36. The original price of a washing machine which was bought for ₹ 13,500 inclusive of 8% VAT is

(a) ₹ 12,420 (b) ₹ 14,580 (c) ₹ 12,500 (d) ₹ 13,492

37. Avinash bought an electric iron for ₹ 900 and sold it at a gain of 10%. He sold another electric iron at 5% loss which was bought for ₹ 1200. On the transaction he has a

(a) Profit of ₹ 75 (b) Loss of ₹ 75 (c) Profit of ₹ 30 (d) Loss of ₹ 30

38. A TV set was bought for ₹ 26,250 including 5% VAT. The original price of the TV set is

(a) ₹ 27,562.50 (b) ₹ 25,000 (c) ₹ 24,937.50 (d) ₹ 26,245

39. Radhika bought a car for ₹ 2,50,000. Next year its price decreased by 10% and further next year it decreased by 12%. In the two years overall decrease percent in the price of the car is

(a) 3.2% (b) 22% (c) 20.8% (d) 8%

Codes:

(a) If both Statement I and Statement II are true and Statement II is the correct explanation of Statement I.

(b) If both Statement I and Statement II are true but Statement II is not the correct explanation of Statement I.

(c) If statement I is true but Statement II is false.

(d) If statement I is false but Statement II is true.

40. **Statement–I:** If Rashmi's income is 60% more than that of Shalu, then Shalu's income is 37.5% less than Rashmi's income.

Statement–II: Percentage $= \frac{\text{Part}}{\text{Whole}} \times 100$

41. **Statement–I:** The list price of an article sold at ₹ 1560 by allowing a discount of 25 % is ₹ 2080.

Statement–II: S.P. = M.P. – discount

42. **Statement–I:** A shopkeeper purchased a bed for ₹ 7000. He spent ₹ 300 on its transportation and ₹ 200 on its polishing. If he sold it for ₹ 8100, then he has 8% profit.

Statement-II: Net S.P. = Price paid for goods + Overhead expenses.

43. **Statement–I:** Rakesh purchased a cycle for ₹ 660 including sales tax. If the rate of sales tax is 10%, then the selling price of cycle is ₹ 600.

Statement–II: Discount $\% = \dfrac{\text{Discount}}{\text{M.P.}} \times 100$

44. **Statement–I:** The value of a car depreciates by 10% every year. If its present value is ₹ 80000, then the value of the car after 2 years is ₹ 64800.

Statement II: In a situation, if the value of article (P) depreciates (or decreases) at $R\%$ per annum, then the value (A) after n years will be $A = P\left(1 + \dfrac{R}{100}\right)^n$.

45. **Statement–I:** In a village, if the population was 3600 in the year 2000, and if it decreases at the rate of 5% per annum, then the population of village in the year 2002 will be 3249.

Statement–II: In a situation, if the value of article (P) depreciates (or decreases) at $R\%$ per annum, then the value (A) after n years will be $A = P\left(1 - \dfrac{R}{100}\right)^n$.

ANSWERS

1. B	2. B	3. D	4. B
5. D	6. B	7. C	8. C
9. D	10. A	11. C	12. A
13. C	14. A	15. C	16. D
17. C	18. A	19. B	20. C
21. D	22. C	23. D	24. B
25. B	26. A	27. B	28. A
29. A	30. C	31. D	32. B

33. C
34. C
35. B
36. C
37. C
38. B
39. C
40. B
41. A
42. C
43. B
44. C
45. A