

SSC CGL Tier 2 Arithmetic Questions

Q1. A shopkeeper marks his goods 20% above cost and allows a discount of 15%. If he sells an article for Rs 2040, the cost price is:

A) 1800 B) 1700 C) 1750 D) 1850

Answer: A

Q2. If a man buys 20 articles at the price of 18 and sells them at a gain of 25%, the gain % on selling price is:

A) 20% B) 22.5% C) 25% D) 30%

Answer: B

Q3. A man sells an article at 12% loss. If he had sold it for Rs 120 more, he would have gained 8%. Find the cost price:

A) 500 B) 600 C) 700 D) 800

Answer: B

Q4. An article is sold at two successive discounts of 10% and 20%. The net discount is:

A) 28% B) 30% C) 25% D) 32%

Answer: A

Q5. A trader allows a discount of 12% on the marked price and still makes a profit of 20% on cost price. If the selling price is Rs 560, the marked price is:

A) 600 B) 630 C) 640 D) 650

Answer: B

Q6. A man bought 2 dozen pens for Rs 240. He sold all at Rs 12 each. Gain % is:

A) 20% B) 25% C) 30% D) 35%

Answer: B

Q7. A man can do a piece of work in 12 days, and his assistant can do it in 16 days. If they work together, in how many days will the work be finished?

A) 6 B) 7 C) 8 D) 9

Answer: C

Q8. A boat goes 30 km downstream and returns in 6 hours. If the speed of the stream is 2 km/h, the speed of the boat in still water is:

A) 5 km/h B) 7 km/h C) 8 km/h D) 10 km/h

Answer: C

Q9. The ratio of ages of A and B is 3:4. Five years hence, the sum of their ages will be 45. The present age of B is:

A) 20 B) 25 C) 30 D) 35

Answer: C

Q10. The cost price of 12 pens and 8 pencils is Rs 72. If a pen costs twice as much as a pencil, the cost of a pencil is:

A) 2 B) 3 C) 4 D) 5

Answer: B

Q11. A sum of Rs 5000 is lent at compound interest at 10% per annum. The amount after 2 years is:

A) 6050 B) 6055 C) 6050.5 D) 6060

Answer: A

Q12. A train 120 m long passes a man walking at 6 km/h in 12 seconds. The speed of the train is:

A) 36 km/h B) 42 km/h C) 54 km/h D) 48 km/h

Answer: D

Q13. The average of 5 numbers is 25. If one number is excluded, the average becomes 23. The excluded number is:

A) 30 B) 35 C) 40 D) 45

Answer: C

Q14. A sum of Rs 7200 is to be divided among A, B, and C in the ratio 3:4:5. The share of B is:

A) 2400 B) 2800 C) 3200 D) 3000

Answer: B

Q15. A cistern has two pipes A and B. A can fill it in 20 minutes, B can empty it in 30 minutes. If both are open, the cistern will be filled in:

A) 50 min B) 60 min C) 40 min D) 45 min

Answer: D

Q16. A man sold an article at 25% gain. Had he sold it for Rs 100 more, the gain would have been 40%. Find the cost price:

A) 200 B) 250 C) 300 D) 350

Answer: B

Q17. A person borrowed Rs 10,000 at 12% per annum simple interest. After 3 years, he pays Rs 3,600 as interest. The principal is:

A) 9,000 B) 10,000 C) 12,000 D) 15,000

Answer: B

Q18. A, B, and C can do a piece of work in 12, 15, and 20 days respectively. They work alternately, starting with A for 1 day. How long will the work last?

A) 8 days B) 9 days C) 10 days D) 11 days

Answer: B

Q19. A sum of Rs 8000 is lent at 10% per annum for 2 years. If interest is compounded annually, the total amount will be:

A) 9600 B) 9680 C) 9700 D) 9720

Answer: B

Q20. A train 200 m long crosses a platform 300 m long in 25 seconds. The speed of the train is:

A) 18 km/h B) 25 km/h C) 72 km/h D) 72.5 km/h

Answer: C

Q21. A sum becomes 9261 in 3 years at 10% per annum compound interest. The principal is:

A) 7000 B) 7500 C) 7700 D) 8000

Answer: D

Q22. A man covers a distance at 12 km/h and returns at 8 km/h. His average speed is:

A) 9.6 km/h B) 9.8 km/h C) 10 km/h D) 10.5 km/h

Answer: A

Q23. A can do a piece of work in 10 days, B in 15 days. They work on alternate days starting with A. The work will be completed in:

A) 7 days B) 8 days C) 9 days D) 10 days

Answer: C

Q24. A sum of Rs 12,500 is divided among A, B, C in proportion to 2:3:5. Find C's share.

A) 5000 B) 4000 C) 4500 D) 6000

Answer: A

Q25. A man borrows Rs 5000 at 10% per annum simple interest. After 3 years he repays Rs 6500. How much extra did he pay?

A) 500 B) 650 C) 1000 D) 1500

Answer: C

Q26. The sum of squares of two consecutive numbers is 365. Find the numbers.

A) 12, 13 B) 13, 14 C) 14, 15 D) 15, 16

Answer: C

Q27. A boat goes 24 km downstream and 16 km upstream in 4 hours. Speed of the stream is 2 km/h. Speed of boat in still water:

A) 10 km/h B) 11 km/h C) 12 km/h D) 13 km/h

Answer: B

Q28. A sum of Rs 5000 amounts to Rs 6100 in 2 years at simple interest. Find the rate of interest:

A) 10% B) 11% C) 12% D) 13%

Answer: C

Q29. A can do $\frac{1}{4}$ of a work in 3 days. B can do the same work in 12 days. They work together. Time taken:

A) 6 days B) 5 days C) 4 days D) 3 days

Answer: B

Q30. A sum of Rs 8000 is lent at 12% per annum compound interest. Amount after 2 years:

A) 9984 B) 9992 C) 10,000 D) 10,112

Answer: D

Q31. A motorboat, whose speed is 12 km/h in still water, takes 1 hour more to go 24 km upstream than to return downstream. Find speed of stream.

A) 2 km/h B) 3 km/h C) 4 km/h D) 5 km/h

Answer: B

Q32. A sum of Rs 6,000 is lent at 5% per annum for 2 years compounded annually. Find amount:

A) 6615 B) 6610 C) 6620 D) 6600

Answer: A

Q33. A man can row 12 km/h in still water. It takes him 1 hour more to row 18 km upstream than downstream. Speed of stream:

A) 2 km/h B) 3 km/h C) 4 km/h D) 5 km/h

Answer: B

Q34. A can do a piece of work in 8 days, B in 12 days, C in 16 days. They work together. Work completed in:

A) 4 days B) 5 days C) 6 days D) 7 days

Answer: B

Q35. A sum of Rs 12,000 is divided among 3 persons so that the first gets twice as much as the second, and the second gets thrice the third. Find third share:

A) 1500 B) 2000 C) 2500 D) 3000

Answer: A

Q36. A man sells an article at a loss of 10%. If he had sold it for Rs 20 more, there would have been a gain of 10%. Cost price:

A) 100 B) 110 C) 120 D) 125

Answer: C

Q37. A shopkeeper marks an article 20% above cost and allows 10% discount. Gain %:

A) 8% B) 9% C) 10% D) 12%

Answer: B

Q38. A sum of Rs 6,000 is invested at 10% per annum simple interest. Amount after

3 years:

A) 7,800 B) 7,900 C) 8,000 D) 8,100

Answer: A

Q39. A sum of Rs 4,000 amounts to Rs 4,840 in 2 years at compound interest. Rate of interest:

A) 10% B) 10.5% C) 11% D) 12%

Answer: D

Q40. A can do $\frac{1}{2}$ of a work in 4 days. B can do it in 6 days. They work together. Time taken:

A) 2.5 days B) 2.75 days C) 3 days D) 3.25 days

Answer: B

Q41. Two numbers are in the ratio 3:4. Their sum is 84. Numbers are:

A) 36, 48 B) 35, 49 C) 30, 40 D) 32, 52

Answer: A

Q42. A train 150 m long passes a pole in 10 seconds. Speed of train:

A) 45 km/h B) 50 km/h C) 54 km/h D) 60 km/h

Answer: C

Q43. A sum becomes Rs 1,331 in 3 years at 10% per annum compound interest. Principal:

A) 1,000 B) 1,010 C) 1,100 D) 1,200

Answer: A

Q44. A and B can do a work in 10 and 15 days. They work on alternate days starting with A. Work completed in:

A) 8 days B) 9 days C) 10 days D) 11 days

Answer: B

Q45. A can do a work in 12 days, B in 16 days. They work together. Time taken:

A) 6.6 days B) 6.8 days C) 7 days D) 7.2 days

Answer: C

Q46. A sum of Rs 5,000 is lent at 5% per annum simple interest. Interest for 3 years:

A) 750 B) 800 C) 850 D) 900

Answer: A

Q47. A cistern has two pipes. One fills in 10 hours, the other empties in 15 hours. Net filling time:

A) 25 hours B) 30 hours C) 35 hours D) 40 hours

Answer: B

Q48. A sum of Rs 6,000 amounts to Rs 7,290 in 3 years at compound interest. Rate of interest:

A) 5% B) 6% C) 7% D) 8%

Answer: B

Q49. A man covers a distance at 10 km/h and returns at 15 km/h. Average speed:

A) 12 km/h B) 12.5 km/h C) 13 km/h D) 13.5 km/h

Answer: B

Q50. A can do a work in 9 days, B in 12 days, C in 18 days. They work together. Time taken:

A) 4 days B) 5 days C) 6 days D) 7 days

Answer: B

Q51. A sum becomes Rs 12,100 in 2 years and Rs 13,310 in 3 years at compound interest. The rate of interest per annum is:

A) 8% B) 9% C) 10% D) 11%

Answer: C

Q52. A and B can do a piece of work in 8 and 10 days respectively. Working together, they can finish it in how many days?

A) 4.44 B) 4.5 C) 5 D) 5.2

Answer: B

Q53. A man sells an article at 25% profit. If he had bought it at 20% less and sold it for Rs 10 more, his profit would have been 40%. Find the cost price.

A) 40 B) 50 C) 60 D) 75

Answer: C

Q54. A train running at 54 km/h crosses a pole in 10 seconds. Find the length of the train.

A) 120 m B) 140 m C) 150 m D) 180 m

Answer: C

Q55. A mixture contains milk and water in the ratio 5:1. How much water should be added to 30 L of mixture so that the new ratio becomes 5:2?

A) 5 L B) 6 L C) 7 L D) 8 L

Answer: B

Q56. A can complete a work in 10 days, B in 15 days. They start together but A leaves after 2 days. Remaining work is completed by B. Time taken by B is:

A) 7 B) 8 C) 9 D) 10

Answer: B

Q57. A man invests Rs 12,000 at 10% per annum simple interest. How much will he get after 4 years?

A) 16,800 B) 17,200 C) 17,500 D) 18,000

Answer: A

Q58. The average of 7 consecutive even numbers is 26. The smallest number is:

A) 14 B) 16 C) 18 D) 20

Answer: D

Q59. The sum of three numbers in A.P. is 24 and their product is 440. The numbers are:

A) 5, 8, 11 B) 4, 8, 12 C) 6, 8, 10 D) 7, 8, 9

Answer: C

Q60. Two taps can fill a tank in 12 and 15 hours respectively. If both are opened together, after how many hours will the tank be $\frac{4}{5}$ full?

A) 6.4 B) 6.8 C) 7 D) 8

Answer: A

Q61. The difference between S.I. and C.I. on Rs 2500 for 2 years at 4% p.a. is:

A) 3 B) 4 C) 5 D) 6

Answer: C

Q62. The difference between compound interest and simple interest on Rs 10,000 at 10% p.a. for 2 years is:

A) 10 B) 20 C) 50 D) 100

Answer: D

Q63. A can do a work in 6 days, B in 9 days. They work together for 3 days, then A leaves. The remaining work will be done by B in:

A) 2 B) 3 C) 4 D) 5

Answer: B

Q64. A man's income is 40% more than that of another. The other's income is what percent less than the first's?

A) 28.57% B) 30% C) 32% D) 35%

Answer: A

Q65. If 15 men can complete a work in 20 days, in how many days will 25 men complete the same work?

A) 10 B) 11 C) 12 D) 13

Answer: C

Q66. The difference between a number and its 60% is 40. The number is:

A) 80 B) 90 C) 100 D) 120

Answer: C

Q67. The average of first 50 natural numbers is:

A) 25 B) 25.5 C) 26 D) 24.5

Answer: B

Q68. A sum of money becomes double in 8 years at simple interest. In how many years will it become three times?

A) 12 B) 14 C) 16 D) 18

Answer: C

Q69. A boat can go 10 km downstream in 2 hours and return in 3 hours. Speed of stream:

A) 1 km/h B) 1.5 km/h C) 2 km/h D) 2.5 km/h

Answer: C

Q70. A sum amounts to Rs 13,310 in 3 years at 10% compound interest. The principal is:

A) 9000 B) 10000 C) 11000 D) 12000

Answer: B

Q71. A person can row 30 km downstream in 3 hours and 18 km upstream in 3 hours. Speed of boat in still water:

A) 7 km/h B) 8 km/h C) 9 km/h D) 10 km/h

Answer: C

Q72. A sells a watch to B at 15% profit. B sells it to C at 10% loss. If C paid Rs 374, find the cost price for A.

A) 350 B) 360 C) 370 D) 380

Answer: B

Q73. A man buys an article for Rs 800 and marks it 40% above cost. After allowing discount, he gains 12%. Find the rate of discount.

A) 15% B) 16% C) 18% D) 20%

Answer: B

Q74. The ratio of the present ages of A and B is 4:5. After 5 years, the ratio becomes 5:6. Find A's present age.

A) 20 B) 25 C) 30 D) 35

Answer: B

Q75. A sum of Rs 8000 amounts to Rs 9680 in 3 years at simple interest. The rate of interest is:

A) 6% B) 7% C) 8% D) 9%

Answer: C

Q76. A pipe can fill a tank in 20 hours, but a leak empties it in 30 hours. In how many hours will the tank be filled?

A) 50 B) 55 C) 60 D) 65

Answer: C

Q77. The difference between the compound interest and simple interest on Rs 10,000 for 2 years at 5% p.a. is:

A) 20 B) 22.5 C) 25 D) 27

Answer: C

Q78. A can complete a work in 10 days, B in 20 days. With the help of C, they can complete it in 4 days. C alone can do it in:

A) 10 B) 12 C) 14 D) 16

Answer: B

Q79. A reduction of 20% in the price of sugar enables a man to buy 5 kg more for Rs 120. Find the original price per kg.

A) 5 B) 6 C) 7 D) 8

Answer: B

Q80. Two numbers are in the ratio 3:5. If each is increased by 10, the ratio becomes 5:7. The numbers are:

A) 15, 25 B) 20, 30 C) 25, 35 D) 30, 50

Answer: A

Q81. A trader gains 20% after giving 10% discount on marked price. Marked price is Rs 660. Find cost price.

A) 450 B) 500 C) 550 D) 600

Answer: B

Q82. A tank can be filled by two pipes in 12 and 16 hours respectively. If both are opened together, how long will it take to fill the tank?

A) 6.8 B) 7 C) 7.2 D) 8

Answer: C

Q83. The difference between compound and simple interest on Rs 4000 for 2 years at 10% per annum is:

A) 30 B) 35 C) 40 D) 45

Answer: C

Q84. A person travels 40 km at 20 km/h and returns at 30 km/h. Average speed is:

A) 24 B) 25 C) 26 D) 27

Answer: A

Q85. A sum of Rs 5000 becomes Rs 5832 in 2 years at compound interest. Rate of interest per annum:

A) 8% B) 9% C) 10% D) 11%

Answer: C

Q86. A can do a work in 5 days, B in 6 days. They work together for 2 days. Fraction of work left:

A) $\frac{1}{3}$ B) $\frac{2}{5}$ C) $\frac{1}{5}$ D) $\frac{1}{6}$

Answer: A

Q87. A person spends 60% of his income. If his income increases by 20% and his expenditure by 10%, what is the % increase in savings?

A) 25% B) 30% C) 40% D) 50%

Answer: D

Q88. The difference between two positive numbers is 4 and their product is 77. Find the numbers.

A) 7, 11 B) 6, 10 C) 8, 12 D) 9, 13

Answer: A

Q89. A can complete a task in 15 days and B in 20 days. Together, they complete it and earn Rs 3500. A's share is:

A) 1500 B) 1800 C) 2000 D) 2100

Answer: D

Q90. A person invests Rs 12,000 at 10% per annum compound interest for 2 years. Amount received:

A) 14,400 B) 14,520 C) 14,640 D) 14,700

Answer: C

Q91. A sum becomes Rs 1728 in 2 years at compound interest at rate 20% per annum. Principal is:

A) 1000 B) 1200 C) 1400 D) 1500

Answer: B

Q92. A can do a job in 18 days, B in 24 days, and C in 36 days. They work together. In how many days will the work be finished?

A) 8 B) 9 C) 10 D) 12

Answer: B

Q93. A car covers a distance in 8 hours at a speed of 75 km/h. If it travels at 100 km/h, how much time will it save?

A) 1 hr B) 1.5 hr C) 2 hr D) 2.5 hr

Answer: C

Q94. The price of sugar increases by 25%. By how much percent should consumption be reduced so that expenditure remains constant?

A) 20% B) 25% C) 30% D) 33.33%

Answer: D

Q95. A sum of Rs 20,000 is invested at 8% per annum compound interest. Amount after 3 years:

A) 24,800 B) 25,920 C) 25,600 D) 26,000

Answer: B

Q96. Two trains of length 200 m and 150 m are moving in opposite directions at 60 km/h and 90 km/h. Time to cross each other:

A) 6 s B) 8 s C) 10 s D) 12 s

Answer: B

Q97. A person spends 75% of his income. If his income increases by 20%, then his expenditure increases by:

A) 15% B) 20% C) 25% D) 30%

Answer: B

Q98. The ratio of two numbers is 4:5. If 10 is added to each, ratio becomes 5:6. Numbers are:

A) 20, 25 B) 30, 40 C) 40, 50 D) 50, 60

Answer: A

Q99. A train crosses a man in 8 seconds and a platform of 120 m in 20 seconds. The length of the train is:

A) 80 m B) 100 m C) 120 m D) 150 m

Answer: B

Q100. A man invests Rs 10,000 at 10% per annum simple interest for 5 years. He reinvests the total amount for 2 more years at 12% compound interest. Final amount:

A) 14,500 B) 15,680 C) 15,740 D) 16,000

Answer: B