

Quant Mega Quiz for SSC Tier-1

- Q1. Average of all odd numbers less than 100 is :
- (a) 49.5
- (b) 50
- (c) 50.5
- (d) 51

Q2. If x% of y is 140 and y% of z is 270. Find relation between x and z.

- (a) z = 1.87x(b) z = 2.2x(c) z = 1.7x(d) z = 1.92x **Q3.** Find the value of $\{(49)^{\frac{3}{2}} + (49)^{-\frac{3}{2}}\}$ (a) $\frac{117549}{343}$ (b) $\frac{117550}{343}$ (c) $\frac{117659}{343}$ (l) $\frac{117659}{343}$
- $(d) \frac{117650}{343}$

Q4. If the height of the equilateral triangle is $2\sqrt{3}$ cm, then determine the area (in sq. cm) of the equilateral triangle.

- (a) 6 (b) $2\sqrt{3}$
- (c) $4\sqrt{3}$
- (d) 12

Q5. Length and breadth of a rectangle are increased by 10% and 20% respectively. What will be the percentage increase in the area of rectangle?

- (a) 30%
- (b) 32%
- (c) 28%
- (d) 33%



12 Months Subscription

Q6. The simple interest on a sum for 8 years is Rs 47500. The rate of interest for the first 5 years is 10% per annum and for the next 3 years is 15% per annum. What is the value (in Rs) of sum?

- (a) 50000
- (b) 60000
- (c) 45000
- (d) 62500

Q7. Selling price of a chair is Rs 1386. If loss percentage is 23%, then what is the cost price (in Rs) of chair?

- (a) 1600
- (b) 1800
- (c) 1900
- (d) 1067

Q8. Marked price of a computer is Rs 48000 and discount is 13%. What additional discount (in percentage) should be offered to the customer to bring the price of computer to Rs 39672?

- (a) 10
- (b) 5
- (c) 8
- (d) 9

SSC

Q9. The line graph shows the number of students of a certain university who failed in the given year in their final exams. Study the diagram and answer the following questions.



Failures in 2014 were greater than that in 2012 by _____.

- (a) 25%
- (b) 16.67%
- (c) 20%
- (d) 15%

Q10. The line graph shows the number of students of a certain university who failed in the given year in their final exams. Study the diagram and answer the following questions.



What is the average number of failures in the last three years?

- (a) 1500
- (b) 1250
- (c) 1350
- (d) 1400



Q11. In an examination Ram scored 25 mark less than Rohit. Rohit scored 45 more marks than Sam. Rohan scored 75 marks which is 10 more marks than Sam. Ravi's score is 50 less than maximum marks of the test. What approximate percentage of marks did Ravi score in the examination if gets 34 marks more than Ram?

- (a) 60 %
- (b) 80%
- (c) 70 %
- (d) 85%

Q12. 40% of the employees of a certain company are men and 75% of the men earn more than Rs 25000 per year. If 45% of the company's employees can more than Rs 25000 per year, what fraction of the women employed by the company earn less than or equal to Rs 25000 per year?

- (a) 1/2
- (b) 3/4
- (c) 2/3
- (d) 4/5



Q13. Working together A and B will complete a job in 15/2 days. If A work alone and complete half the job and then B taken over and complete the remaining half of the job, they will complete the task in 20 days. How long will A alone take to do the job if B in more efficient than A?

- (a) 25
- (b) 30
- (c) 20
- (d) 35

Q14. Two vehicle are sold for Rs 1897 each. One in Sold at a profit of 42.84% and another at a loss of 6.25%. What in the net profit/loss?

- (a) 14.65%
- (b) 15.30%
- (c) 13.20%
- (d) 18.17%

Q15. The ratio of speed of a motorboat to that of the current of water is 55:7. The boat goes along with the current in 6 hours 24 minutes. It will come back in.

- (a) 9.3 hours
- (b) 7.3 hours
- (c) 11.3 hours
- (d) 8.2 hours

Q16. A solid cube is cut into 64 identical cubes. What is the percentage increase in the total surface area?

- (a) 150
- (b) 200
- (c) 300
- (d) 250

Q17. Perimeter of a Rhombus is P unit and sum of length of its diagonal is m unit. Find its area.

(a) $m^2 P$ (b) mp^2

(c) $\frac{1}{4} (m^2 - p^2)$ (d) $\frac{1}{4} (p^2 - m^2)$

Q18. On selling an article for Rs. 78, there is a profit of 56%. If it is sold for Rs. 72, the profit percent will be:

- (a) 44%
- (b) 36%
- (c) 48%
- (d) 50%

Q19. A canvas is fully painted by using only two colours pink and blue in the ratio 2 : 3. In half the region, the ratio of pink and blue colours used is 2 : 7. Find the cost of other half region painted with blue colour if the total cost for painting the canvas is Rs. 1800?

(a) Rs. 450

- (b) Rs. 570
- (c) Rs. 380
- (d) Rs. 400

Q20. A crate of egg holds one rotten egg out of every 25 egg in it. If 5 out of 8 rotten eggs are unusable and there are total 10 unusable eggs in the crate, then calculate the number of eggs in the crate.

- (a) 380
- (b) 400
- (c) 420
- (d) 440

Q21. Two trains of equal length travelling in opposite directions at 72 km/h and 108 km/h cross each other in 10 seconds. In how much time (in seconds) does the first train cross a platform of length 350 m?

(a) 30 (b) 32 (c) 36 (d) 24 Q22. If x + y + z = 19, $x^2 + y^2 + z^2 = 133$, then the value of $x^3 + y^3 + z^3 - 3xyz$ is: (a) 361 (b) 342 (c) 380 (d) 352 Q23. If $8(x + y)^3 - (x - y)^3 = (x + 3y)(Ax^2 + Bxy + Cy^2)$, then the value of (A - B - C) is: (a) -2 (b) -6 (c) 10 (d) 14

Q24. An article is sold for Rs x. If it is sold at $33\frac{1}{3}\%$ of this price, there is a loss of 20%. What is the percentage profit when it is sold for Rs x?

(a) 140 (b) 125

- (c) 130
- (d) 120



Q25. What is the simplified value of 5÷10 of 10×4+4÷4 of 4×10-(10-4)÷16×4=? (a) 1.2 (b) 2.5 (c) 21 (d) 58.5

Q26. In a class of 80 students, the ratio of the urban to the rural is 5:3. In a test, the average score of the rural students is 40% more than that of the urban students. If the average score of all the students is 69, then what is the average score of the rural students?

- (a) 80
- (b) 76
- (c) 92
- (d) 84

Q27. The compound interest on a certain sum for 3 years at 15% p.a., interest compound yearly, is Rs 4167. What is the simple interest on the same sum in $4\frac{4}{5}$ years at the same rate?

- (a) Rs 6144
- (b) Rs 6000
- (c) Rs 4800
- (d) Rs 5760

Q28. The given Bar Graph presents Income and Expenditure (in crores) of a company for five years, 2014 to 2018.



The average Income (per year) of the company in five years is what percentage more than its Expenditure in 2015?

- (a) 24.2
- (b) 20.8
- (c) 24.6
- (d) 22.4

Q29. In \triangle ABC, AD is the bisector of \angle BAC, meeting BC at D. If AC=21 cm, BC=12 cm and the length of BD is 2 cm less than DC, then the length of side AB is:

(a) 14 cm

- (b) 15 cm
- (c) 18 cm
- (d) 10 cm

Q30. The value of

 $\frac{4tan^{2}30^{\circ} + \frac{1}{4}sin^{2}90^{\circ} + \frac{1}{8}cot^{2}60^{\circ} + sin^{2}30^{\circ}cos^{2}45^{\circ}}{sin60^{\circ}cos30^{\circ} - cos60^{\circ}sin30^{\circ}}$ is: (a) 1³/₄ (b) 4 (c) 2¹/₂ (d) 3¹/₂



