

## **Quant Mega Quiz for SSC CHSL**

- Q1. There are 850 students in a class. Out of these, 44% are Muslims, 28% are Hindus, 10% are Sikhs and remaining students belong to the other communities. How many students are there of other communities?
- (a) 173
- (b) 143
- (c) 153
- (d) 163
- Q2. The average age of 11 players of a cricket team is increased by 2 months when two of them ages 18 years and 20 years are replaced by two new players. The average age of the new players is
- (a) 19 years 1 month
- (b) 19 years 6 month
- (c) 19 years 11 month
- (d) 19 years 5 month
- Q3. A bag contains an equal number of 1 rupee, 50 paise and 25 paise coins respectively. If the total value is Rs. 35, how many coins of each type are there?
- (a) 20 coins of each type
- (b) 21 coins of each type
- (c) 24 coins of each type
- (d) 22 coins of each type
- Q4. A vessel of capacity 2 litre has 25% alcohol and another vessel of capacity 6 litre has 40% alcohol. The total liquid of 8 litre is poured out in a vessel of capacity 10 litre and the rest part of the vessel is filled with water. What is the new concentration of alcohol in mixture?
- (a) 29%
- (b) 20%
- (c) 21%
- (d) 30%

## Q5.

If 
$$x = \frac{1}{2+\sqrt{3}}$$
,  $y = \frac{1}{2-\sqrt{3}}$ 

then the value of  $8xy(x^2 + y^2)$  is?

- (a) 112
- (b) 194
- (c) 290
- (d) 196



Q6. 5 kg of butter was bought by a shopkeeper for Rs. 300. One kg become unsaleable. He sells the
remaining in such a way that on the whole he occurs a loss of 10%. At what per kg was the butter
sold?

- (a) Rs. 67.50
- (b) Rs. 52.50
- (c) Rs. 60
- (d) Rs. 72.50

Q7. The population of a town is 3, 11, 250. The ratio of women to men is 43: 40. If there are 24% literate among women and 10% illiterate, among men, the total number of literate persons in the town is

- (a) 1,70,700
- (b) 1,73,700
- (c) 1,75,700
- (d) 1,73,200

Q8. 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

Q9. The difference between simple interest and compound interest on a certain sum of money for three years at 10% per annum is Rs. 15 and 50 paise. The sum is:

- (a) Rs. 5,000
- (b) Rs. 550
- (c) Rs. 5,500
- (d) Rs. 500

Q10. Two trains of length 190 m and 210 m respectively, are running in opposite directions on parallel tracks. If their speeds are 40 km/hr and 32 km/hr respectively in what time will they cross each other?

- (a) 20 seconds
- (b) 22 seconds
- (c) 25 seconds
- (d) 30 seconds

Q11. Two goats are tethered to diagonally opposite vertices of a field formed by joining the mid-points of the adjacent sides of another square field of side  $20\sqrt{2}$ m. What is the total grazing area of the two goats if the length of the rope by which the goats are tethered is  $10\sqrt{2}$ m?

- (a)  $100\pi \text{ m}^2$
- (b)  $50(\sqrt{2}-1)\pi m^2$
- (c)  $100\pi(3-2\sqrt{2})m^2$
- (d)  $200\pi(2-\sqrt{2})m^2$



Q12. Two equal maximum sized circular plates are cut-off from a circular paper-sheet of circumference 352 cm. The circumference of each circular plate is,

- (a) 176 cm
- (b) 180 cm
- (c) 165 cm
- (d) 150 cm

Q13. Find the ratio of the diameter of the circles inscribed in an equilateral triangle, the diameter circumscribing that equilateral triangle and the height of the same equilateral triangle.

- (a) 1:2:1
- (b) 2:4:3
- (c) 1:3:4
- (d) 3:2:1

Q14. Find the area of a right angled triangle if the radius of its circumcircle is 5 cm and the altitude drawn to the hypotenuse is 4 cm.

- (a) 20 cm<sup>2</sup>
- (b) 22 cm<sup>2</sup>
- $(c) 20\sqrt{2} \text{ cm}^2$
- (d)  $22\sqrt{2} \text{ cm}^2$

015. Find the area of a circle whose circumference is 44 cm.

- (a) 154 cm<sup>2</sup>
- (b)  $150 \text{ cm}^2$
- (c)  $145 \text{ cm}^2$
- (d)  $140 \text{ cm}^2$

Q16. The inner circumference of a circular field is 704 m. A road 7 m wide is constructed on the outside. Find the area of the path.

- (a)  $5082 \text{ m}^2$
- (b)  $5060 \text{ m}^2$
- (c)  $5060.5 \text{ m}^2$
- (d)  $5000 \text{ m}^2$

Q17. A square park has each side of 100 m. At each corner of the park, there is a flower bed in the form of a quadrant of radius 14 m as shown in the figure. Find the area of the remaining part of the park.

- (a) 9184 m<sup>2</sup>
- (b)  $9284 \text{ m}^2$
- (c)  $9834 \text{ m}^2$
- (d)  $9384 \text{ m}^2$

Q18. An equilateral triangle of side 6 cm has its corners cut off to form a regular hexagon. Area (in cm<sup>2</sup>) of this regular hexagon will be

- (a)  $3\sqrt{3}$
- (b)  $3\sqrt{6}$
- (c)  $6\sqrt{3}$
- (d)  $\frac{1}{2}$

COW Q19. A wire, when bent in the form of a square, encloses a region having area 121 cm<sup>2</sup>. If the same wire is bent into the form of a circle, then the area of the circle is (take  $\pi=22/7$ )?

- (a) 144 cm<sup>2</sup>
- (b) 180 cm<sup>2</sup>
- (c) 154 cm<sup>2</sup>
- (d) 176 cm<sup>2</sup>

Q20. ABC is an equilateral triangle of side 2 cm. With A, B, C as centres and radius 1 cm three arcs are drawn. The area of the region within the triangle bounded by the three arcs is?

- $3\left(\sqrt{3}-\frac{\pi}{2}\right)$  cm<sup>2</sup>
- (b)  $\left(\sqrt{3} \frac{3\pi}{2}\right) \text{cm}^2$ (c)  $\left(\frac{\pi}{2}\right) \text{cm}^2$ (d)  $\left(\frac{\pi}{2} \sqrt{3}\right) \text{cm}^2$

Q21. A wall clock gains 2 minutes in 12 hours, while a table clock loses 2 minutes every 36 hours. Both are set right at 12 noon on Tuesday. The correct time when both show the same time next would be

- (a) 12.30 at night, after 130 days
- (b) 12 noon, after 135 days
- (c) 1.30 at night, after 130 days
- (d) 12 midnight, after 135 days



Q22. A and B started a business by investing Rs. 3,50,000 and Rs. 1,40,000 respectively. A gets 20% of the yearly profit for managing the business. Thereafter the profit is divided in the ratio of the capital. If A receives totally Rs. 38,000 more than B at the end of a year, then the total profit is (a) Rs. $28,000$ (b) Rs. $2,80,000$ (c) Rs. $2,80,000$ (d) Rs. $2,80,000$ (d) Rs. $2,80,000$
Q23. A does one-fifth of a work in a week. B finishes the same in a fortnight. B starts the work and works only for 3 days. Thereafter A completes the job. He will finish it in  (a) 10 days (b) 7 days (c) 12 days (d) 28 days
Q24. A tank can be filled by pipe A in 2 hours and pipe B in 6 hours. At 10 A.M. pipe A was opened. At what time will the tank be filled if pipe B is opened at 11 A.M.?  (a) 12.45 A.M.  (b) 5 P.M  (c) 11.45 A.M.  (d) 12 P.M.
Q25. A swimming pool has 3 drain pipes. The first two pipes A and B, operating simultaneously, can empty the pool in half the time that C, the $3^{rd}$ pipe, alone takes to empty it. Pipe A, working alone, takes half the time taken by pipe B. Together they take 6 hours 40 minutes to empty the pool. Time taken by pipe A to empty the pool, in hours, is  (a) 15  (b) 10  (c) 30  (d) 7
Q26. A can do a certain work in 12 days. B is 60% more efficient than A. How many days will B and A together take to do the same job? (a) $80/13$ (b) $70/13$ (c) $75/13$ (d) $60/13$
Q27. 2 men and 4 boys can do a piece of work in 10 days, while 4 men and 5 boys can do it in 6 days. Men and boys are paid wages according to their output. If the daily wage of a man is Rs. 40, then the ratio of daily wages of a man and a boy will be (a) $5:3$ (b) $5:2$ (c) $7:4$ (d) $7:3$

Q28. A, B and C can do a piece of work in 30, 20 and 10 days respectively. A is assisted by B on one day and by C on the next day, alternately. How long would the work take to finish?

- (a) 9(3/8) days
- (b) 5(3/8) days
- (c) 4(3/8) days
- (d) 6(3/8) days

Q29. A fan in a shop is offered at a discount of 20%. It is sold during clearance sale at 6% discount over the already discounted price at Rs. 846. The original marked price of the fan is



- (b) Rs. 946
- (c) Rs. 850
- (d) Rs. 896



Q30. A trader allows a trade discount of 20% and a cash discount of 6(1/4)% on the marked price of the goods and gets a net gain of 20% of the cost. By how much above the cost should the goods be marked for the sale?

- (a) 40%
- (b) 50%
- (c) 60%
- (d) 70%

