

## Quant Mega Quiz for RRB NTPC

**Q1. The volume of a solid cylinder with height 784 cm is  $246400 \text{ cm}^3$ . The radius of cylinder is—**

- (a) 12
- (b) 28
- (c) 10
- (d) 14

**Q2. What is the value of  $\frac{[(\sin 15^\circ + \sin 75^\circ)(\sin 15^\circ - \sin 75^\circ)]}{[(\cos 15^\circ + \cos 75^\circ)(\cos 15^\circ - \cos 75^\circ)]}$**

- (a) 0
- (b) 1
- (c) -1
- (d) 2

**Q3. If  $x^2 - 4x + 1 = 0$ , then find  $x^{-1}(x^8 + 1)(x^{-3}) = ?$**

- (a) 198
- (b) 194
- (c) 14
- (d) 196

**Q4. If A had worked alone he would have taken 63 hours to do the task. What is B's share, if A and B together on a task finishing it in 36 hours and they get paid Rs. 5,950 for it?**

- (a) 3600
- (b) 3400
- (c) 2750
- (d) 2550

**Q5. The volume of conical tent is  $4620 \text{ m}^3$  and its base area is  $1386 \text{ m}^2$ . The height of the tent is—**

- (a) 11 m
- (b) 10 m
- (c) 12 m
- (d) 14 m

**Q6. If it takes 42 days for a pond to get filled with rain water. If the level of water doubles each day. Then how long would it take to fill  $1/16$  of pond.**

- (a) 38 days
- (b) 39 days
- (c) 32 days
- (d) 8 days

TEST SERIES

Bilingual



**RRB NTPC  
PREMIUM**

**100+ TOTAL TESTS**

Validity : 12 Months

**Q7.** In what ratio should coffee costing Rs. 2800/kg be mixed with coffee costing Rs. 1750/kg so that the cost of the mixture is Rs. 2150/kg.

- (a) 8 : 13
- (b) 13 : 8
- (c) 7 : 5
- (d) 5 : 7

**Q8.** Ram and Pankaj started a partnership business investing in the ratio of 7 : 42. Atul joined them after 5 months with an amount equal to  $\frac{2}{21}$ th of Pankaj. What was their profit (in Rs.) at the end of the year if Atul got Rs. 5060 as his share?

- (a) 1, 10, 420
- (b) 1, 11, 320
- (c) 98,720
- (d) 1,05,472

**Q9.** The average of 27 numbers is zero, out of them how many may be greater than zero, at the most?

- (a) 15
- (b) 20
- (c) 26
- (d) 0

**Q10.** A fraction is greater than twice its reciprocal by  $\frac{7}{15}$ . What is the fraction?

- (a)  $\frac{3}{5}$
- (b)  $\frac{5}{3}$
- (c)  $\frac{3}{4}$
- (d)  $\frac{4}{3}$

**Q11.** What is the reflection of the point (-3, 1) in the line  $x = -2$ ?

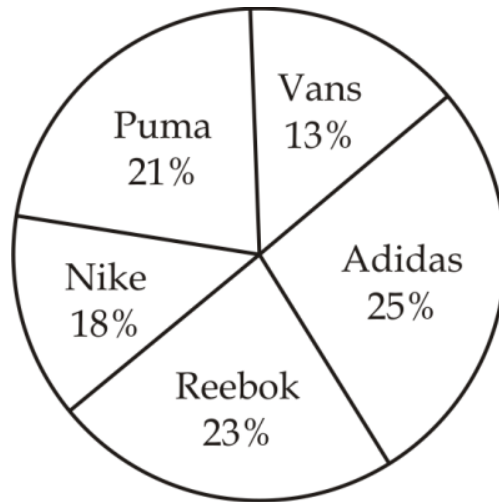
- (a) (-1, 1)
- (b) (-3, -5)
- (c) (1, 1)
- (d) (-3, 5)

**Q12.** If  $ax - 4y = -6$  has a slope of  $-\frac{3}{2}$ . What is the value of a?

- (a) 6
- (b) 3
- (c) -6
- (d) -3



Directions (13-16): The pie chart given below shows the number of shoes of 5 different brands in a multi brand store. There are total 1200 shoes.



Q13. How many shoes are there of Reebok brand?

- (a) 230
- (b) 276
- (c) 286
- (d) 216

Q14. What is the difference in number of shoes of Puma and Vans?

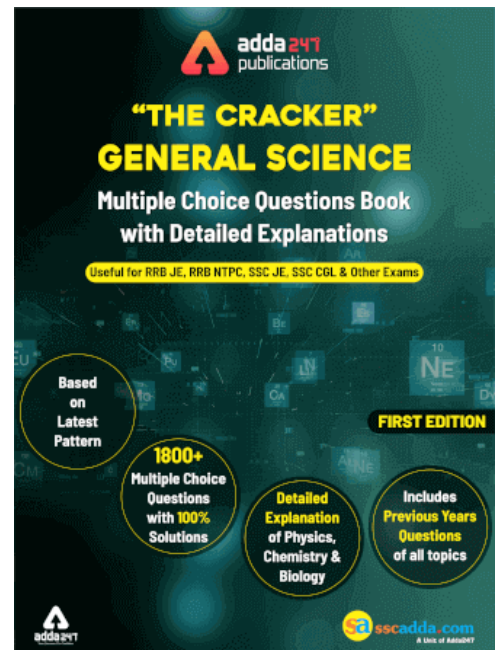
- (a) 96
- (b) 156
- (c) 84
- (d) 112

Q15. The difference between the number of shoes of Reebok and Nike is same as the difference between which of the following two brands?

- (a) Puma and Adidas
- (b) Reebok and Adidas
- (c) Vans and Nike
- (d) Nike and Adidas

Q16. Puma shoes are how much percent more than the Nike Shoes?

- (a) 14.28
- (b) 16.66
- (c) 25
- (d) 21.33



**Directions (17-20):** The table given below shows the percentage of literate people in 6 cities. The table also shows the ratio of males to females among literate people.

| City   | % of literate people | Males : Females |
|--------|----------------------|-----------------|
| City 1 | 80                   | 4 : 5           |
| City 2 | 85                   | 7 : 4           |
| City 3 | 78                   | 3 : 2           |
| City 4 | 63                   | 1 : 1           |
| City 5 | 92                   | 9 : 7           |
| City 6 | 58                   | 2 : 3           |

% of literate people of any city = (Literate people of the city/Total population of the city) × 100

**Q17.** If the total population of City 4 is 600000, then how many literate people are there in city 4?

- (a) 480000
- (b) 378000
- (c) 468000
- (d) 348000

**Q18.** Total population of City 6 is 200000 and the total population of City 2 is 220000. What is the respective ratio of literate males of City 2 and literate females of City 6?

- (a) 348 : 595
- (b) 255 : 199
- (c) 595 : 348
- (d) 199 : 255

**Q19.** If there are 259210 literate females in City 5, then what is the total population of City 5?

- (a) 644000
- (b) 354200
- (c) 690000
- (d) 483000

**Q20.** The population of the 6 cities are 250000, 200000, 220000, 300000, 150000 and 400000 respectively. Which is the correct order of the number of literate people in these cities?

- (a) City 6 > City 1 > City 4 > City 2 > City 3 > City 5
- (b) City 4 > City 6 > City 1 > City 2 > City 3 > City 5
- (c) City 6 > City 4 > City 1 > City 3 > City 2 > City 5
- (d) City 6 > City 1 > City 4 > City 3 > City 2 > City 5

**Q21.** If  $2x^2 + y^2 + 6x - 2xy + 9 = 0$ , then the value of  $(4x^3 - y^3 + x^2y^2)$  is—

- (a) -9
- (b) 9
- (c) 0
- (d) -3



Q22. If  $\frac{\sin^2\theta}{\tan^2\theta - \sin^2\theta} = 3$ ,  $0^\circ < \theta < 90^\circ$ , then the value of  $\tan \theta + \sec \theta$  is—

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

Q23. The average of twelve numbers is 47. The average of the first six numbers is 49 and that of the last three numbers is 45.5. The 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> numbers are equal. Find the ratio of average of 7<sup>th</sup> and 8<sup>th</sup> number to that of 8<sup>th</sup> and 9<sup>th</sup> numbers.

- (a) 4 : 7
- (b) 7 : 4
- (c) 1 : 1
- (d) 2 : 3

Q24. Simple interest on a certain sum at certain rate of interest is 529% of the sum. If the number represents rate percent and time in years be equal then the rate of interest is—

- (a) 24.5%
- (b) 23%
- (c) 23.12%
- (d) 22.23%

Q25. A sum of Rs 56960 is divided among A, B and C such that A receives 10% more than B and B receives 12% less than C. What is C's share in the amount?

- (a) 17600
- (b) 9653.2
- (c) 19360
- (d) 20000

