Quantitative Aptitude for RRB NTPC

Q1.

By how much does $(\sqrt{12}+\sqrt{18})$ exceed $(2\sqrt{3}+2\sqrt{2})$?

(a) 2

(b) $\sqrt{3}$

(c) $\sqrt{2}$

(d) 3

Q2. In a certain year, the average monthly income of a person was Rs. 3,400. For the first eight months of the year, his average monthly income was Rs. 3,160 and for the last five months, it was Rs. 4,120. His income in the eighth month of the year was

(a) Rs. 3,160

(b) Rs. 5,080

(c) Rs. 15,520

(d) Rs. 5,520

Q3. The average age of 40 students of a class is 18 years. When 20 new students are admitted to the same class, the average age of the students of the class is increased by 6 months. The average age of newly admitted students is

(a) 19 years

(b) 19 years 6 months

(c) 20 years

(d) 20 years 6 months

Q4. Of the three numbers, the second is twice the first and thrice the third. If the average of the three numbers is 44, the largest number is

(a) 24

(b) 72

(c) 36

(d) 108

Q5. A cricketer had a certain average of runs for his 64 innings. In his 65th innings, he is bowled out for no score on his part. This brings down his average by 2 runs. His new average of runs is

(a) 130

(b) 128

(c) 70

(d) 68

Q6. A man completed a certain journey by a car. If he covered 30% of the distance at the speed of 20 km/hr, 60% of the distance at 40 km/hr and the remaining distance at 10 km/hr; his average speed for the whole journey was

(a) 25 km/hr
(b) 28 km/hr
(c) 30 km/hr
(d) 33 km/hr

Q7. The time duration of 1 hour 45 minutes is what percent of a day?

(a) 7.218
(b) 7.291
(c) 8.3
(d) 8.24

Q8. In an examination, 35% of the candidates failed in Mathematics and 25% in English. If 10% failed in both Mathematics and English, then how much percent passed in both the subjects?

(a) 50
(b) 55
(c) 57
(d) 60

Q9. If 2/3 of A = 75% of B = 0.6 of C, then A : B : C is

(a) 2 : 3 : 3
(b) 3 : 4 : 5
(c) 4 : 5 : 6
(d) 9 : 8 : 10

Q10. Each side of a rectangular field is diminished by 40%. By how much percent is the area of the field diminished?

(a) 32
(b) 64
(c) 25
(d) 16

Q11.

Find the remainder in expression– $\frac{1234 \times 12345 \times 2378}{9}$

(a) 3
(b) 6
(c) 4
(d) 5

Q12. The taxi charges in a city contain fixed charges and additional charge/km. The charge for a distance of 10 km is Rs. 350 and for 25 km is 800. The charge for a distance for a distance of 30 km is:

(a) Rs. 900
(b) Rs. 950
(c) Rs. 800
(d) Rs. 750

Q13.

The least number among $\frac{4}{9}, \sqrt{\frac{9}{49}}, 0.24$ and $(0.8)^2$ is

(a) $\frac{4}{9}$
(b) $\sqrt{\frac{9}{49}}$
(c) 0.45
(d) $(0.8)^2$

Q14. When a number is divided by 56, the remainder obtained is 29. What will be the remainder when the number is divided by 8?

(a) 4
(b) 5
(c) 3
(d) 7

Q15.

$(4^{61} + 4^{62} + 4^{63})$ is divisible by

(a) 3
(b) 11
(c) 13
(d) 17

Q16. A girl was asked to multiply a number by 7/8, instead she divided the number by 7/8 and got the result 15 more than the correct result. The sum of the digits of the number was:

(a) 4
(b) 8
(c) 6
(d) 11

Q17. Divide 37 into two parts so that so that 5 times one part and 11 times the other are together 227.

(a) 15, 22
(b) 20, 17
(c) 25, 12
(d) 30, 7

Q18. A man spends 1/4 the of his income on food, 2/3 rd of it on house rent and the remaining which is Rs. 630 on other commodities. Find his house rent?

(a) Rs. 5040
(b) Rs. 3520
(c) Rs. 4890
(d) Rs. 4458

Q19.

The value of $\frac{1}{15}+\frac{1}{35}+\frac{1}{63}+\frac{1}{99}+\frac{1}{143}$ is

(a) 5/39
(b) 4/39
(c) 2/39
(d) 7/39

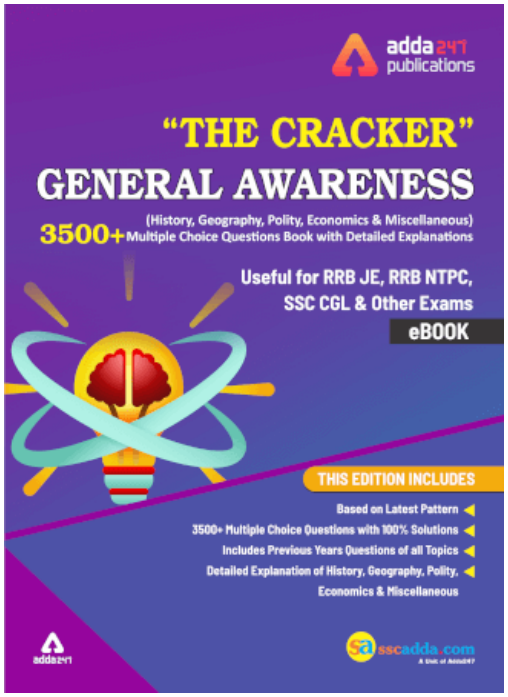
Q20. Each member of a picnic party contributed twice as many rupees as the total number of members and the total collection was Rs. 3042. The number of members present in the party was

(a) 2
(b) 32
(c) 40
(d) 39

Q21.

If $\frac{\tan\theta+\cot\theta}{\tan\theta-\cot\theta}=2, (0\le\theta\le 90°)$ then the value of sin θ is

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



Q22. If cos x + cos y = 2, the value of sin x + sin y is

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

Q23. In a factory 60% of the workers are above 30 years and of these 75% are males and the rest are females. If there are 1350 male workers above 30 years, the total number of workers in the factory is

(a) 3000

(b) 2000

(c) 1800

(d) 1500

Q24. If $x^2 + y^2 + z^2 = 14$ and $xy + yz + zx = 11$, then the value of $(x + y + z)^2$ is

(a) 16

(b) 25

(c) 36

(d) 49

Q25. A thief is noticed by a policeman from a distance of 200 m. the thief starts running and the policeman chases him. The thief and the policeman run at the rate of 10 km/hr and 11 km/hr respectively. What is the distance between them after 6 minutes?

(a) 100 m

(b) 190 m

(c) 200 m

(d) 150 m

Q26.

If $\tan\theta = \frac{8}{15}$, the value of $\frac{\sqrt{1-\sin\theta}}{\sqrt{1+\sin\theta}}$ is

(a) 1/5

(b) 2/5

(c) 3/5

(d) 0

Q27. A, B and C started a business by investing Rs. 24,000, Rs. 32000 and Rs. 18000 respectively. A and B are active partners and get 15% and 12% of total profit and remaining profit is to be distributed among them in the ratio of their investment. If C got total Rs. 65700 as a profit, what was the total amount of profit?

(a) Rs. 4,70,000

(b) Rs. 3,70,000.

(c) Rs. 3,45,000.

(d) Rs. 1,57,000.

Q28. The difference between CI and SI for 3 years is 992. If rate of Interest is 10%. Find the Principal?
(a) 22000
(b) 30000
(c) 28000
(d) 32000

Q29. Divide 27 into two parts so that 5 times the first and 11 times the second together equals to 195. Then ratio of the first and second parts is
(a) 3 : 2
(b) 17 : 10
(c) 2 : 7
(d) 5 : 4

Q30. A motor boat covers a certain distance downstream in a river in 3 hours. It covers the same distance upstream in 3 and half an hour. If the speed of the water is 1.5 km/hr, then the speed of the boat in still water is?
(a) 17 km/hr
(b) 17.5 km/hr
(c) 19.5 km/hr
(d) 19 km/hr