

Cognizant mock 1

Q1. There are forty students in a class out of which there are 14 who are taking Maths and 29 who are taking Computer. What is the probability that a randomly chosen student from this group is taking only the Computer class?

- (a) 40% (b) 55% (c) 65% (d) 70%

Q2. Find the number, the second digit of which is smaller than its first digit by 4, and if the number was divided by the digit's sum, the quotient would be 7.

- (a) 51 (b) 62 (c) 73 (d) None of these

Q3. If all 6s get inverted and become 9s, between 1 and 100 then by how much will the sum of all numbers change including both?

- (a) 300 (b) 330 (c) 333 (d) None of these

Q4. Rajesh and Prabhu went to a bookshop. Rajesh purchased 5 pens, 3 notebooks, and 9 pencils and used up all her money. Prabhu purchased 6 pens, 6 notebooks, and 18 pencils and paid 50% more than what Rajesh paid. What % of the Rajesh money was spent on pens?

- (a) 12.5 (b) 62.5 (c) 75 (d) Cannot be determined

Q5. In a group of persons travelling in a bus, 6 persons can speak Tamil, 15 can speak Hindi, and 6 can speak Gujarati. In that group, none can speak any other language. If 2 persons in the group can speak two languages and one person can speak all three languages, then how many persons are there in the group?

- (a) 21 (b) 22 (c) 24 (d) 23

Q6. There are 2 trucks facing each other at a distance of 500 cm from each other. Each truck moves forward by 100 cm at a speed of 50 cm/s and then moves backwards by 50 cm at a speed of 25 cm/s. How long will they take to collide?

- (a) 12 sec (b) 16 sec (c) 13 sec (d) 14 sec

Q7. What is the greatest number that will divide 964, 1238, and 1400 and leave a remainder of 41, 31, and 51 respectively?

- (a) 71 (b) 58 (c) 64 (d) 79

Q8. The average temperature of Monday, Tuesday and Wednesday were 37°C and on Tuesday, Wednesday and Thursday was 34°C. If the temperature on Thursday was $\frac{4}{5}$ th of that of Monday, then what was the temperature on Thursday?

- (a) 36 °C (b) 36.5 °C (c) 34 °C (d) 35.5 °C

Q9. There are 6 cities, and every city is connected to each other. How many different routes can one trace from A to B, such that no city is touched more than once in any one route?

- (a) 72 (b) 65 (c) 60 (d) 48

Q10. A secret can be said by only 2 persons in 5 minutes. The same person tells the secret to 2 more persons and so on. How long will take to tell it to tell 768 persons?

- (a) 500 min (b) 50 min (c) 47.5 min (d) 49 min

Q11. Three cubes of edges 6 cms, 8 cms, and 10 cms are melted without loss of metal into a single cube. The edge of the new cube will be:

- (a) 16 cm (b) 14 cm (c) 12 cm (d) 8 cm

Q12. A reduction in the price of mangoes by 20% enables a farmer to purchase 12 more mangoes for Rs. 15. So what could be the price of 16 mangoes before the reduction of the price?

- (a) Rs. 9 (b) Rs. 7 (c) Rs. 5 (d) Rs. 6

Q13. Aman completes a journey in 10 hours. He travels the first half of the journey at the rate of 21 km/hr and the second half at the rate of 24 km/hr. Find the total journey in km.

- (a) 220 km (b) 234 km (c) 230 km (d) 224 km

Q14. There are two alarm clocks ringing at regular intervals of 50 seconds and 48 seconds. If they first beep together at 12 noon, at what time will they beep again together?

- (a) 12:10 PM (b) 12:20 PM (c) 12:11 PM (d) 12:12 PM

Q15. Ram purchased 20 dozen toys at the rate of Rs. 375 per dozen. He sold each one of them at the rate of Rs. 33. What was his percentage profit?

- (a) 5.6 % (b) 4.5 % (c) 3.5 % (d) 6.5 %

Q16. A cistern can be filled by a tap in 4 hours while it can be emptied by another tap in 9 hours. If both the taps are opened simultaneously, then after how much time cistern will get filled?

- (a) 7 hours (b) 7.1 hours (c) 7.2 hours (d) 7.3 hours

Q17. In how many different ways, can the letters of the word 'INHALE' be arranged?

- (a) 650 ways (b) 360 ways (c) 120 ways (d) 720 ways

Q18. In a meeting, there are 12 people. All the persons of one country shake hands with all delegates of the other country. Find the number of handshakes possible?

- (a) 66 (b) 288 (c) 144 (d) 234

Q19. What is the smallest number that when decreased by 8 is divisible by 21, 27, 33, and 55?

- (a) 1490 (b) 10405 (c) 15490 (d) none of the above

Q20. There are 8 football teams in a certain league and each team plays each of the other teams exactly once. If each game is played by 2 teams, what is the total number of games played?

- (a) 15 (b) 16 (c) 64 (d) 28

Q21. Find the remainder when $(100!)^{100}$ is divided by 23?

- (a) 3 (b) 2 (c) 1 (d) 0

Q22. One pipe can fill a bucket three times as fast as another pipe. If together the two pipes can fill the bucket in 36 minutes, then the slower pipe alone will be able to fill the bucket in:

- (a) 144 minutes. (b) 81 minutes. (c) 108 minutes. (d) 192 minutes.

Q23. Aman's speed with the current is 15 km/hr and the speed of the current is 2.5 km/hr. What is Aman's speed against the current?

- (a) 8.5 km/hr (b) 9 km/hr (c) 10 km/hr (d) 12.5 km/hr

Q24. Seats for Mathematics, Physics and Biology in a school are in the ratio 5:7:8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?

- (a) 6:7:8 (b) 2:3:4 (c) 6:8:9 (d) None of the above

Q25. A hollow iron pipe is 21 cm long and its external diameter is 8 cm. If the thickness of the pipe is 1 cm and iron weighs 8 g/cm³, then the weight of the pipe is:

- (a) 3.6 kg (b) 3.696 kg (c) 36 kg (d) 36.9 kg

Q26. Rohit's father is three times elder than Rohit. After 8 years, he would be two and a half times of Rohit's age. After a further 8 years, how many times would he be of Rohit's age?

- (a) 2 times (b) 2.5 times (c) 2.75 times (d) 3 times.

Q27. A tap can fill a bucket in 6 hours. After half the bucket is filled, three more similar taps are opened. What is the total time taken to fill the bucket completely?

- (a) 3 hrs 45 min (b) 3 hrs 15 min (c) 4 hrs 15 min (d) 4 hrs 45 min

Q28. A ship, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. What is the speed of the stream in km/hr?

- (a) 4 (b) 6 (c) 5 (d) 10

Q29. In a mixture 60 litres, the ratio of milk to water is 2:1. If this ratio is to be 1:2, then what is the quantity of water needed to be further?

- (a) 60 litres (b) 50 litres (c) 40 litres (d) 30 litres

Q30. A hall is 15 m long and 12 m broad. If the sum of the areas of the floor and the ceiling is equal to the sum of the areas of four walls, the volume of the hall is:

- (a) 720 (b) 1200 (c) 900 (d) 1800

Q31. A train running at 5 km/hr and 125 meters long passes a man moving in the same direction in which the train is going, in 10 seconds. The speed of the train is:

- (a) 50 km/hr (b) 54 km/hr (c) 55 km/hr (d) 60 km/hr

Q32. A sum fetched a total simple interest of Rs. 4016.25 at the rate of 9 % p.a. in 5 years. What is the sum of the money or the principal amount?

- (a) Rs. 4462.50 (b) Rs. 8032.50 (c) Rs. 8900 (d) Rs. 8925

Q33. In an election between two candidates, one got 55% of the total valid votes and got 20% invalid votes. At the end of the day when the total number of votes were counted, the total number was found to be 7500. So what was the total number of valid votes that the winning candidate got, was:

- (a) 2800 (b) 3300 (c) 3100 (d) 2700

Q34. January 1, 2008, is Tuesday. What day would lie on Jan 1, 2009?

- (a) Thursday (b) Sunday (c) Tuesday (d) Wednesday

Q35. A whole number n which when divided by 4 gives 3 as remainder. What will be the remainder when $2n$ is divided by 4?

- (a) 0 (b) 1 (c) 2 (d) 4

Q36. In a 100 m race, Aman takes 36 seconds to complete the race and Bijay takes 45 seconds. By what distance Aman beats Bijay in the race?

- (a) 20 meters (b) 25 meters (c) 22.5 meters (d) 9 meters

Q37. Identify the odd number from the series: 835, 734, 642, 751, 853, 981, 532

- (a) 532 (b) 853 (c) 981 (d) 751

Q38. In a group of 6 men and 4 women, four are to be selected. In how many different ways can they be selected such that at least one man should be there in the group?

- (a) 209 ways (b) 194 ways (c) 205 ways (d) 120 ways

Q39. A box contains 15 marbles out of which 4 are white, 5 are red and 6 are blue. Three balls are to be drawn at random from the bag. What is the probability that all of them are red is:

- (a) $\frac{1}{22}$ (b) $\frac{2}{89}$ (c) $\frac{2}{77}$ (d) $\frac{2}{91}$

Q40. X, Y and Z can do a piece of work in 20, 30 and 60 days respectively depending on their capacity of doing work. If X is assisted by Y and Z on every third day, then in how X will complete the work?

- (a) 12 days (b) 15 days (c) 16 days (d) 18 days

Answer key

1	C	9	B	17	D	25	B	33	D
2	D	10	C	18	A	26	A	34	A
3	B	11	C	19	D	27	A	35	C
4	B	12	C	20	D	28	C	36	A
5	D	13	D	21	D	29	A	37	D
6	D	14	B	22	A	30	B	38	A
7	A	15	A	23	C	31	A	39	D
8	A	16	C	24	B	32	D	40	B