

Only write non-project related questions

Q.1) There is a bus with 100 labelled seats (labelled from 1 to 100). There are 100 persons standing in a queue. Persons are also labelled from 1 to 100. Find the probability that 100th person sits on his place i.e. 100th seat.

Q.2) You are in a dark room. There are 50 coins placed on table, out of which 10 coins are showing tails and 40 coins heads. Divide this set into 2 groups such that both groups have same number of coin showing tails?

Q.3) Three ants are sitting at the three corners of an equilateral triangle. Each ant starts randomly picks a direction and starts to move along the edge of the triangle. What is the probability that none of the ants collide?

Q4) There are 10 people in the room, they were supposed to shake hands with each other. Total how many hand shakes happened?

Q5) IDFC Bank wants to take review for their credit card. The population is of 5 lakhs and 10 thousand sample is to be chosen. How to choose that 10000 samples.

Q6) There are 2 people who are stuck in a jungle. They find a shelter for the night. A third person joins them for the night. They are starving so they decide to split the food they have equally. The first person, say person A has 5 chapatis and second, person B has 3 chapatis. They make 3 equal parts of each chapati and divide the pieces into 8 for each person. The next morning the third person leaves. He leaves behind a bag of 8 coins and a note saying they can divide these coins into two of them. How do they divide these 8 coins based on their contributions?

Q7) Two ropes which take 60 minutes to burn. If you have a matchstick with you how will you tell 45 minutes are done?

Q8) There are two trains X and Y. Running on an 80 km track. Running opposite to each other at a speed of 40km/hr each. There is a bird which starts from X and approaches towards Y at a speed of 100km/hr. Now when the bird reaches Y turns and goes back to X. And when again he reaches X he turns back and goes towards Y. It does till X and Y collide with each other. Find total km traveled by Bird.

Q.9) Find probability of drawing 2 cards that have the same suit.

Q.10) Suppose there are two timers 4 and 7 min each. How will you count 9 mins ?

Q.11) There are 2 rope which have uneven thickness , each ropes takes 1hr to burn in total , half rope takes 20 min to burn rest 60 . Find a way to calculate 15mins

Q12) Express your birth year into $(a^b)^c$.

13) there are 100 doors in a room 1st person opens all the door 2nd person toggles the door number multiple of 2 3rd person toggle the door multiple of 3 at the end how many door are open if 100 person enter

Q14) If there are two trains opposite to each other, one running at 50km/hr and the other at 70km/hr and there's a bird flying in between them at 60km/hr. How much distance will the bird cover before the trains collide?

Q15) There are 25 horses. You have to find the fastest 3 horses. At a time, if only 5 horses can be raced, identify how many races are required to find the fastest 3 horses. Speed of the horses is unknown.

Q16) How will you cut a cake in 8 equal parts with only 3 cuts?

Q17) Two trains x and y are at a distance of 80km. travelling to each other at a speed of 40km/hr each a boat is travelling at a speed of 100km/hr how much distance the boat will cover when the trains will crash