Q.1

20 tickets, on which numbers 1 to 20 are written, are mixed thoroughly and then a ticket is drawn at random out of them. Find the probability that the number on the drawn ticket is a multiple of 3 or 7.

2.From a pack of 52 playing cards, Jacks, Queens and Kings of red colour are removed. From the remaining, a card is drawn at random. Find the probability that drawn card is:

1.a black king.

2.a card of red colour.

3.a card of black colour.

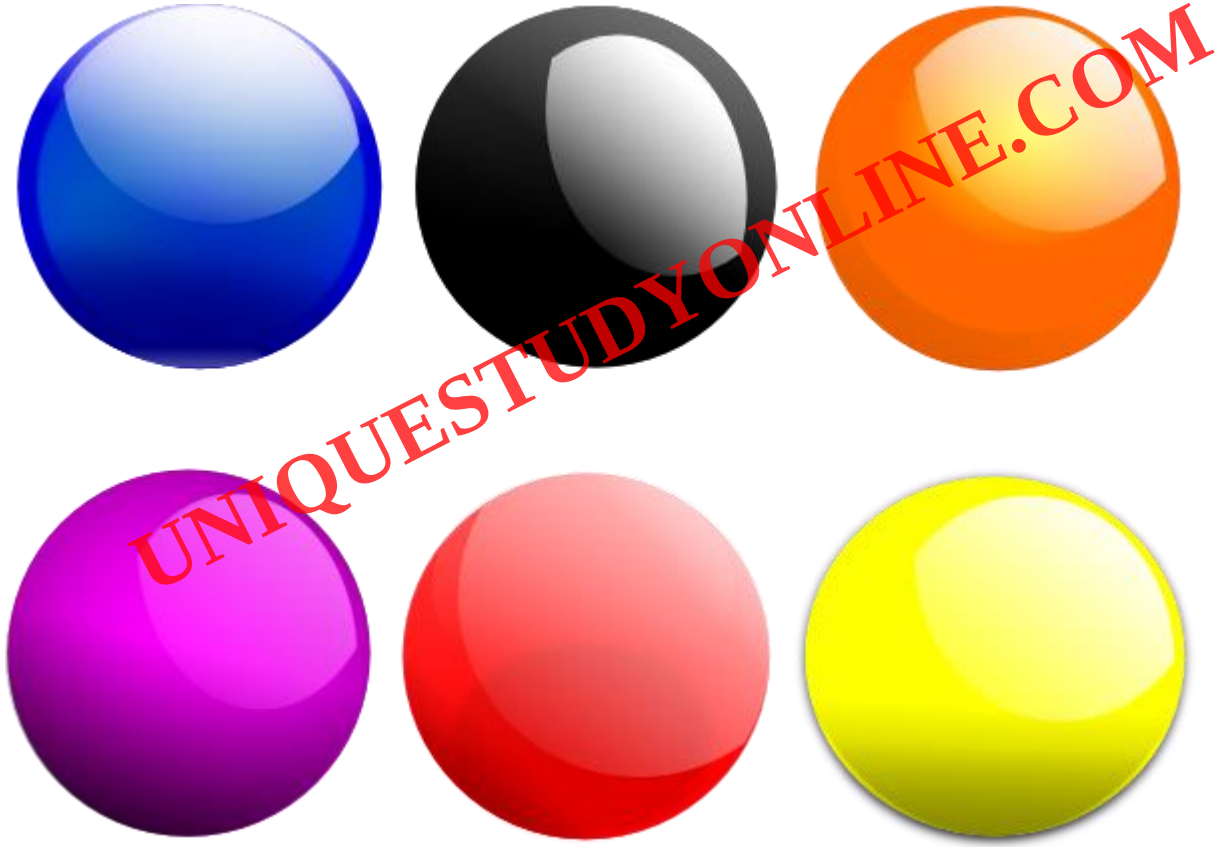
3.A game consist of tossing a one-rupee coin 3 times and nothing the outcome each time. Ramesh will win the game if all the show the tosses same result, (i.e. either all three heads or all three tails) and loses the game otherwise. Find the probability that Ramesh will lose the game.

4.A number x is selected at random from the numbers 1,4,9,16 and another numbery is selected at random from the numbers 1, 2, 3, 4. Find the probability that the value of xy is more than 16

5.Two different dice are tossed together. Find the probability that the product of the two numbers on the top of the dice is 6.

6.The probability of selecting a red ball at random from a jar that contains only red, blue and orange balls is 1/4. The probability of selecting a blue ball at random from the same jar is 1/3. If the jar contains 10 orange balls, find the total number of balls in the jar.

7.A bag contains, white, black and red balls only. A ball is drawn at random from the bag. If the probability of getting a white ball is 3/10 and that of a black ball is 2/5,then find the probability of getting a red ball. If the bag contains 20 black balls, then find the total number of balls in the bag.



8.A bag contains 18 balls out of which x balls are red.

1.If one ball is drawn at random from the bag, what is the probability that it is not red?

2.If 2 more red balls are put in the bag, the probability of drawing a red ball will be 9/8 times the probability of drawing a red ball in the first case. Find the 8

value of X.

9.A bag contains 20 balls out of which x balls are red.

1.If one ball is drawn at random from the bag, find the probability that it is not red.

2.If 4 more red balls are put into the bag, the probability of drawing are red ball will be 5/4 times the probability of drawing a red ball in the first case. Find the value of X.

10.

A card is drawn at random from a well-shuffled deck of playing cards. Find the probability that the card drawn is

1. a card of spade or an ace.

2.a black king.

3. neither a jack nor a king

4.either a king or a queen

11.A box contains cards bearing numbers from 6 to 70. If one card is drawn at random from the box, find the probability that it bears

1.a one digit number.

2.a number divisible by 5.

3.an odd number less than 30.

4.a composite number between 50 and 70.

12.A piggy bank contains hundred 50 p coins, fifty 1 coins, twenty 2 coins and ten 5 coins. If it is equally likely that one of the coins will fall out when the bank is turned upside down, find the probability that the coin which fell

1.will be a 50 p coin

2.will be of value more than 1

3.will be of value less than 5

4.will be a 1 or 2 coin

13.A bag contains 12 balls, out of which x are white.

1.If one ball is drawn at random, find the probability that it is a white ball.

2.If 6 more white balls are put in the bag, the probability of drawing a white ball is double than that in

•Find x.

14.Two dice are thrown simultaneously. Determine the probability that the difference of the numbers on the two dice is 2

15. Two customers Shyam and Ekta are visiting a particular shop in the same week (Tuesday to Saturday). Each is equally likely to visit the shop on any day as on another day. What is the probability that both will visit the shop on

(i) the same day?

(ii) consecutive days?

(iii) different days?