

## CBSE TEST PAPER-06

### MATHEMATICS (Class-10)

#### Chapter : Probability

- 1) A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears.
  - a) not divisible by 5 or 10.
  - b) two digit number.
  
- 2) Two coins are tossed simultaneously once. Find the probability of getting
  - a) at least one head and one tail.
  - b) at most 2 heads.
  
- 3) In a single throw of two dice, find probability of getting
  - a) doubles
  - b) a total of 11
  
- 4) A bag contains 12 balls out of which  $x$  are black. If one ball is drawn at random from the box, what is the probability that it will be a black ball. If more black balls are put in the box the probability of drawing a black ball is now double of what it was before. Find  $x$
  
- 5) 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 day?
  - iii) Different day?
  
- 6) One card is drawn from well-shuffled pack of 52 cards. Find the probability of getting
  - a) the jack of hearts
  - b) a face card.

- 7) A lot consists of 144 ball pens of which 20 are defective and the others are good. Nuvi will buy a pen if it is good, but will not buy it if it is defective. The shopkeeper draws one pen at random and gives it to him. What is the probability that
- i) She will buy it
  - ii) She will not buy it
- 8) All the three face cards of spade are removed from a well shuffled pack of 52 cards & card is drawn from the remaining pack. Find the probability of getting
- a) a black face card
  - b) a queen of diamond
  - c) a spade
  - d) a black card
- 9) Savita and Hamida are friends what is the probability that both will have
- i) the same birthday?
  - ii) different birthday?
- 10) A letter is chosen at random from the letters of the word “ASSASSI NATION” and the probabilities that the letter chosen is a
- i) vowel
  - ii) consonant