PRISM WORLD

Std.: 10 (English) | Maths - I | Marks: 20

Date: | Time: 1 hrs

Chapter: 5

Q.1 Choose the carrect alternatives. **(3)**

1) A card is selected at random from a well-shuffled deck of 52 cards. The probability of its being a face card is

a. $\frac{3}{13}$ b. $\frac{4}{13}$ c. $\frac{6}{13}$ d. $\frac{9}{13}$

2) A fair die is thrown once. The probability of getting a composite number is

a. $\frac{1}{3}$ b. $\frac{1}{6}$ c. $\frac{2}{3}$ d. 0

3) If a letter is chosen at random from the letters of English alphabet, then the probability that it is a letter of the word 'DELHI' is

a. $\frac{1}{5}$ b. $\frac{1}{26}$ c. $\frac{5}{26}$ d. $\frac{21}{26}$

Q.2 Solve the following question. (Any Two) **(4)**

1) Two -digit numbers are formed from the digits 2, 3, 5, 7, 9 without repetition. Find the probability of the events
(i) A is the event that number is a multiple of 5.
(ii) B is the event that the number is divisible by 3.

2) A card is drawn at random from well-shuffled pack of 52 playing cards. Find the probability that the card drawn is
a face card.

3) Two coins are tossed simultaneously, Find the probability of getting at least one head.

Q.3 Solve the following question. (Any Two) **(6)**

1) If one coin and one die are thrown simultaneously, find the probability of the following events.
(i) Event A : To get a head and a prime number..
(ii) Event B : To get tail and an odd number.

2) A die is thrown.
(i) A is the event of getting a number divisible by 2.
(ii) B is the event of getting a number less than 4.
(iii) C is the event of getting a prime number.
Find the probability of each event.

3) A two digit number is formed with digits 2, 3, 5, 7, 9 without repetition. What is the probability that the number formed is
(1) an odd number ? (2) a multiple of 5 ?

Q.4 Solve the following question. (Any One) **(4)**

1) A card is drawn at random from well-shuffled pack of 52 playing cards. Find the probability that the card drawn is

a. i. King ii. A face card iii. A red card.
b . i. Jack of hearts ii. A diamond iii. Not a diamond.

2) There are six cards in a box, each bearing a number from 0 to 5. Find the probability of each of the following events, that a card drawn shows,
(1) a natural number. (2) a number less than 1. (3) a whole number. (4) a number is greater than 5.

Q.5 Solve the following question. (Any One) **(3)**

1) Write sample space 'S' and number of sample point n(S) for each of the following experiments. Also write events A, B, C in the set form and write n(A), n(B), n(C). Three coins are tossed simultaneously.
Condition for event A : To get at least two heads.
Condition for event B : To get no head.
Condition for event C : To get head on the second coin.

2) Write sample space 'S' and number of sample point n(S) for each of the following experiments. Also write events A, B, C in the set form and write n(A), n(B), n(C).
Two dice are rolled simultaneously,
Event A : The sum of the digits on upper faces is a multiple of 6.
Event B : The sum of the digits on the upper faces is minimum 10.
Event C : The same digit on both the upper faces.