**Self-Assignment – 1**

**Topic: Probability**

**Class: 10th Max. Marks: 25**

**Answer the following. Each question carry ½ mark. 10 × ½ = 5M**

1. What is the probability of a certain event?
2. Can -1 be probability of an event? Explain.
3. Find the probability of getting a prime number from the factors of 6 ?
4. What is the other name of theoretical probability?
5. Give an example of experiments that have equally likely outcomes?
6. Who gave the definition of probability at first?
7. What is the probability that the card drawn will be queen from well shuffled deck of cards?
8. In an A.P, a = 2, d = 3 and an = 14. What is the probability to select a number in the A.P is multiple of 3?
9. A dice is thrown once. Find the probability of getting a composite number?
10. What is the probability of getting a vowel from the word ‘MATHEMATICS’?

**Answer the following. Each question carries 1 mark 4 × 1 = 4M**

1. What is the probability of getting exactly 2 heads, when three coins are tossed simultaneously?
2. If P(E) = 0.547 then find the probability of ‘not E’?
3. For what value of ‘x’, may be possible probability of an event?
4. Is getting tail, complementary to getting a head when a coin tossed? Give reason?

**Answer the following. Each question carries 2 mark. 4 × 2 = 8M**

1. A bag contains cards numbered from 1 to 50. A card is drawn at random from the bag. Find the probability that it bears two digit number which is multiple of 7?
2. Sitha and Sailaja are friends. What is the probability that both will have (a) difference birthdays (b) the same birthday?
3. If a number x is chosen at random from the numbers -2, -1, 0, 1, and 2. What is the probability that x² < 2?

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| Blood group | A | B | AB | O |
| Number of students | 10 | 18 | 14 | 8 |

1. From the following data, find the probability of selecting ‘B’ blood group student?

**Answer the following. Each question carries 4 marks 2 × 4 = 8M**

1. Two dice are rolled at same time and the sum of the numbers appearing on them is noted. Find the probability of getting each sum, from 3 to 5 separately?

Or

If two dice are thrown at the same time, find the probability of getting sum of the dots on top is prime?

1. A lot of 20 bulbs contain 4 defective ones. One bulb is drawn at random from the lot. What is the probability that this bulb is defective? Suppose the bulb drawn is previous case is not defective and is not replaced. Now one bulb is drawn at random from the rest. What is the probability that this bulb is not defective?

Or

One card is drawn from a well shuffled deck of 52cards. Find the probability of getting (i) a king of red colour (ii) a face card (iii) a red face card (iv)the jack of hearts (v) a spade (vi) the queen of diamonds.