**Full name: …………………**

**TEST**

**I.MULTIPLE CHOICE SECTION (**Choose the best answer**)**

**Question 1.**  Toss a fair and homogeneous coin once. The number of sample space elements is:

**A.  B.  C.  D.** 

**Question 2.** Given and are two events of a random experiment. The event: “  ” is called:

**A.** Intersection event.

**B.** Complementary event.

**C.** Union event.

**D**.Disjoint event.

**Question 3.** Given  and  are two events of a random experiment. If  then  and is called two:

**A.** Intersection event.

**B.** Complementary event.

**C.** Union event.

**D**.Disjoint event.

**Question 4.** If  and  are two independent events of an experiment , then  is equal to:

A.  B. 

C.  D. 

**Question 5.** Given  and  are two mutually exclusive events of a random experiment that satisfy and then,  is equal to

**A. **

**B. **

**C. **

**D. **

**Question 6.** Two marksmen, A and B, independently shoot one bullet each at a target. The probabilities of A and B hitting the target are  and 0,7 respectively. the probability of the event Both marksmen hit the target is equal to

**A.  B.  C.  D**. 

**Question 7.** Randomly select a positive integer from  to  Let be the event of selecting an even number, and let be the event of selecting a number divisible by Then, the eventconsists of the numbers:

**A. **

**B. **

**C. **

**D**. 

**Question 8**. Given the probability of hitting the bullseye is Calculate the probability that, in three independent shots, the person hits the bullseye all three times.

**A.**  **B.**  **C.**  **D.** 

**Question 9.** Box A contains  white balls,  red balls, and blue balls. Box B contains  white balls,  red balls and  blue balls.Randomly drawing one ball from each box, the probability that both balls are red is:

**A.  B.  C.  D.**

**Question 10.** Two marksmen independently fire a single bullet each at a target. The probabilities of hitting the target for the two marksmen are  and  The probability that at least one marksman hits the target is

**A.**  **B.**  **C.**  **D.** 

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| **Answer** | **C** | **A** | **D** | **D** | **C** | **B** | **D** | **D** | **A** | **B** |