

CHAPTER-14 | Probability

QUIZ PART-01

1. Probability is the measure of the:

- A. Weight of an event
- B. Chance of an event occurring
- C. Speed of an event
- D. Size of an event (B)

Explanation: Probability measures how likely an event is to occur.

2. An experiment is called a random experiment when:

- A. It always gives one fixed result
- B. Its result can be predicted in advance
- C. It has more than one possible outcome and cannot be predicted in advance
- D. It has no outcome (C)

Explanation: A random experiment has multiple outcomes and cannot be predicted beforehand.

3. Which of the following is a deterministic experiment?

- A. Throwing a normal dice
- B. Tossing a usual coin
- C. Drawing a card from a deck
- D. Tossing a coin having heads on both sides (D)

Explanation: A deterministic experiment always gives a fixed and certain result.

4. If a coin is tossed twice, the sample space is:

- A. {H, T}
- B. {HH, TT}
- C. {HH, HT, TH, TT}
- D. {HHT, TTH} (C)

Explanation: All possible outcomes when tossing a coin twice are HH, HT, TH, TT.

5. A desired outcome of a random experiment is called:

- A. Sample space
- B. Event
- C. Trial
- D. Formula (B)

Explanation: An event is any desired outcome or result of an experiment.

6. An event having only one outcome is called:

- A. Compound event
- B. Sure event
- C. Elementary event
- D. Impossible event (C)

Explanation: An elementary event consists of only one outcome.

7. Getting at least one head when two coins are tossed is a:

- A. Sure event
- B. Compound event
- C. Impossible event
- D. Deterministic event (B)

Explanation: It includes multiple outcomes (HH, HT, TH), so it is a compound event.

8. If $P(E) = 0.07$, then the probability of 'not E' is:

- A. 0.07
- B. 0.93
- C. 0.90
- D. 1.07 (B)

Explanation: Complementary probability = $1 - P(E) = 1 - 0.07 = 0.93$.

9. The probability of getting an odd number when a dice is thrown is:

- A. $1/6$
- B. $1/3$
- C. $1/2$
- D. $2/3$ (C)

Explanation: Odd numbers are 1, 3, 5 \rightarrow 3 outcomes out of 6 $\rightarrow 3/6 = 1/2$.

10. A card is drawn from a deck of 52 cards. The probability of getting a queen is:

- A. $1/26$
- B. $1/13$
- C. $4/13$
- D. $4/52$ (B)

Explanation: There are 4 queens in 52 cards $\rightarrow 4/52 = 1/13$.