

Statistics Ics Part 1 Chapter 7 Online Test

| Sr | Questions | Answers Choice |
|----|---|--|
| 1 | What is the probability that a value chosen at random from a particular population is larger than the median of the population. | A. 0.25 B. 0.5 C. 1.0 D. 0.67 |
| 2 | Why are the outcomes of a coin tossing mutually exclusive. | A. The outcome of any toss is not affected by the outcome of those preceding it. B. Both a head and a tail cannot turn up on any one toss C. The probability of getting a head and the probability of getting a tail is the same. D. All of these |
| 3 | The simple probability of occurrence of an event is called the. | A. Joint probability B. Conditional probability C. Marginal probability D. Subjective probability |
| 4 | If one event is unaffected by the outcome of another event, the two events are said to be | A. Dependent B. Independent C. Mutually exclusive D. Both b and c |
| 5 | $\text{Var}(B/aX) = ?$ | A. $1/a\text{Var}(X)$ B. $b^2/a^2\text{Var}(X)$ C. $b^2/a\text{Var}(X)$ D. None of these |
| 6 | $F(+\infty)$ is always equal to: | A. 0 B. Two C. One D. None of these |
| 7 | Hourly temperature recorded by weather bureau is the example of: | A. Discrete variable B. Continuous variable C. Qualitative D. Both A and B |
| 8 | For two independent random variables, $\text{Var}(x) = 14$ and $\text{Var}(Y) = 5$, then $\text{var}(X-y)$ is equal to. | A. 9 B. 70 C. 19 D. None of these |
| 9 | $E(Y^2) - [E(y)]^2$ is the formula, and to compute. | A. Variance of the random variable B. Mean of the random variable C. Both A and B D. None of these |
| 10 | If $y = -7x$ then $E(y) = \dots\dots\dots$ | A. $E(x)$ B. $-7X$ C. $-7E(X)$ D. Zero |
| 11 | The properties of discrete probability distribution are: | A. $\sum p(x) = 1$ and $\sum x \cdot p(x) = 1$ B. $\sum P(x) = 1$ and $\sum x \cdot P$ C. $\sum P(x) = 1$ and $0 \leq P(x) \leq 1$ D. All of these above |
| 12 | The Area of trapezoid is equal to: | A. sum of parallel sides \times base B. sum of parallel sides \times base/2 C. 2 \times base \times sum of parallel sides D. Sum of parallel sides \times base/4 |
| 13 | Coefficient of variation (C.V) is given below | A. $\text{Mean} / \text{S.D} \times 10$ B. $\text{Mean} / \text{S.D} \times 100$ C. $\text{S.D} / \text{Mean} \times 100$ D. $\text{S.D} / \text{Mean}$ |
| 14 | For discrete random variable 'X' the expectation of X i.e $E(x)$ is equal to: | A. $\sum p(x)$ B. $\sum xp(x)$ C. $\sum x^2 p(x)$ D. $\sum x$ |

D. One

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Var (KY) =

- A. KY
- B. $K^2 \text{Var}(Y)$
- C. $K^2 \text{Var}(Y)$
- D. None of these

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$E(X \pm Y) = \dots$

- A. $E(X) + E(Y)$
- B. $E(X) - E(Y)$
- C. $E(x) \pm E(Y)$
- D. None of these

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A random variable is also called.

- A. Chance variable
- B. Stochastic variable
- C. Discrete variable
- D. Both A and B