Statistics Mcqs Paper 2013

- **Statistics Mcqs Paper 2013**
- 1. Two mutually exclusive events are also:
- (a) Dependent events (b) Independent events (c) Exhaustive events (d) None of these
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- 2. In which definition of probability, the condition of mutually exclusive and equally likely events is
- imposed?
- (a) Subjective approach (b) Relative frequency (c) Classical definition (d) None of these
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- 3. In Poisson distribution:
- (a) Mean > Variance (b) Mean < Variance (c) Mean Variance (d) None of these
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- 4. When sample size n becomes larger and larger and sample estimate tends to the respective population
- parameter, this property of estimators is called:
- (a) Unbiasedness (b) Consistency (c) Reliability (d) None of these
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- 5. If the voting preference of 100,000 registered voters are to study, what kind of sampling should be
- used?
- (a) Simple Random Sampling (b) Quota Sampling (c) Stratified Random Sampling (d) None of these
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- 6. If the sampling frame not available then which of the sampling technique could be adopted with
- ease:
- (a) Simple Random Sampling (b) Stratified Random Sampling
- (c) Cluster Random Sampling (d) None of these
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- 7. The complete list of the sampling units is called:
- (a) Sampling Frame (b) Unit List (c) Sample Space (d) None of these
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- 8. A cricket captain wins the toss for three consecutive matches. What is the probability that he will call
- correctly for the fourth match?
- (a) 1/2 (b) 1/4 (c) 1/8 (d) None of these
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- 9. If X has binomial distribution with parameter p and n then the variance of X is:
- (a) n pq
- (b) np (c)
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- 11. Which of the following statement is true for Normal distribution?
- (a) It is skewed to the right (b) It has always a mean of zero and a standard deviation of one
- (c) Its mean, median and mode are equal (d) None of these
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- 12. Which of the following statement is true?
- (a) The slope coefficient in regression and the correlation coefficient always have the same sign
- (b) A regression line always passes through origin (c) The correlation coefficient can exceed than 1

- (d) None of these
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- 13. Testing of hypotheses is a phase to check the validity of:
- (a) Population parameter (b) Sample estimate (c) Population (d) None of these
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- 14. Any set of outcomes of a random experiments is called:
- (a) Event (b) Event space (c) Sample points (d) None of these
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- 15. When a difference between two groups is statistically significant this means that:
- (a) The difference is statistically real but of little practical significance
- (b) The difference is probably the result of sampling variation
- (c) The difference is not likely to be due to chance variation (d) None of these
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- 16. The degree of freedom for two independent samples will be based on:
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- 17. As the sample size increases:
- (a) The standard deviation of the population decreases (b) The population means increases
- (c) The standard error of the mean decreases (d) None of these
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- 18. With a lower level of significance, the probability of rejecting a true null hypothesis:
- (a) Remains same (b) Increases (c) Decrease (d) None of these
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- 19. Which one is NOT the characteristic of a random experiment:
- (a) It has at least two outcomes (b) The number of all possible outcomes are not known in advance
- (c) It can be repeated any number of times under similar conditions (d) None of these
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Statistics Mcqs for Lecturer & Subject Specialist PSC Exam

- If a card is chosen from a standard deck of cards, what is the probability of getting a diamond (♦) or a club(♣)?A 26/52=1/2
  B 13/52
  C 20/52
  D 12/52
  Question 2
- A listing of the possibile outcomes of an experiment and their corresponding probability is calledA Random Variable
  B Contingency table
  C Bayesian table
  D Probability distribution

E Frequency distribution

Question 3
- If you roll a pair of dice, what is the probability that (at least) one of the dice is a 4 or the sum of the dice is 7?A 4/36
  B 13/36
  C 21/36
  D 15/36

Question 4
- The collection of one or more outcomes from an experiment is calledA Probability
  B Event
  C Random Variable
  D Z-Value
  E Random Experiment

Question 5
- Which of the following is not a condition of the binomial distribution?A Only 2 possible outcomes
  B have constant probability of success
  C must have at least 3 trials
  D trials must be independent

Question 6
- Which of the following is not an example of a discrete probability distribution?A The sale or purchase price of a house
  B The number of bedrooms in a house
  C The number of bathrooms in a house
  D Whether or not a home has a swimming pool in it.

Question 7
- If a card is chosen from a standard deck of cards, what is the probability of getting a five or a seven?A 4/52
  B 1/26
  C 8/52
  D 1/169

Question 8
- If the occurrence of one event means that another cannot happen, then the events areA Independent
  B Mutually Exclusive
  C Bayesian
  D Empirical

Question 9
- In which approach to probability the outcomes are equally likely to occur?A Classical Probability
  B Subjective Probability
  C Relative Frequency
  D Independent

Question 10
- In a Poisson probability distributionA The mean and variance of the distribution are same (equal)
  B The probability of success is always greater than 5
  C The number of trials is always less than 5
  D It always contains a contingency table

Question 11
- In special rule of addition of probability, the events are alwaysA Independent events
  B Mutually Exclusive events
  C Bayesian
  D Empirical

Question 12
- The joint probability isA The likelihood of two events happening together
  B The likelihood of an event happening given that another event has already happened

C Based on two mutually exlclusive events

D Also called Prior probability

Question 13

- The the special rule of multiplication of probability, the events must beA Independent

B Mutually exclusive

C Bayesian

D Empirical

Question 14

- Which of the following is not a correct statement about a probability.A It must have a value between 0 and 1

B It can be reported as a decimal or a fraction

C A value near 0 means that the event is not likely to occur/happens

D It is the collection of several experiments.

Binomial distribution is negatively skewed whenA p=0

B p>1/2

C p<1/2

D p=-1/2

E p=1/3

Question 2

- Successive trials in binomial distribution areA Dependent

B Independent

C Equally Likely

D Mutually exclusive

E None

Question 3

- If in a binomial distribution n = 1 then E(X) isA q

B p

C 0

D 1

Question 4

- In which distribution successive trials are without replacementA Hypergeometric distribution

B Binomial distribution

C Poisson distribution

D Geometric distribution

Question 5

- Hypergeometric distribution has parametersA 2

B 1

C 3

D 4

E No

Question 6

- Binomial distribution has parametersA Three

B Two

C One

D Four

E None

Question 7

- Binomial distribution is symmetrical whenA p = q

B p > q

C p < q

D np > npq

Question 8

- A random variable X has binomial distribution with n = 10 and p = 0.3 then variance of X is A 10
  B 12
  C 2.1
  D 21
  E None
  Question 9
- The mean of hypergeometric distribution isA nk
  N
- B N−k
  n
- C nN
  k
- D n+k
  N
- Question 10
- In binomial distribution n=6 and p=0.9, then the value of P(X=7) isA One
  B Less than zero
  C Zero
  D More than zero
  Question 11
- In a binomial probability distribution it is impossible to findA $P(X < 0)$
  B $P(X = 0)$
  C $P(X > 0)$
  D $P(0 \leq X \leq n)$
  Question 12
- The mean, median and mode for binomial distribution will be equal whenA p =0.5
  B p< 0.5
  C p> 0.5
  D p= 1
  E None of these
  Question 13
- Each trial in Binomial distribution hasA One Outcome
  B Two Outcome
  C Three Outcome
  D Four Outcome
  Question 14
- A fair coin is tossed four times, the probability of getting four heads isA 1/4
  B 1/2
  C 1/16
  D 1
  E 0
  Question 15
- Which of the following is not the property of binomial distributionA n is fixed
  B has two outcomes
  C Trials are independent
  D Probability of success varies from trial to trial
  Question 16
- The variance of binomial distribution is alwaysA Less than mean
  B Equal to mean
  C Greater than mean
  D Equal to standard deviation
  E None of these
  Question 17

- The probability of success changes from trial to trial in A Binomial distribution
  B Geometric distribution
  C Sampling distribution
  D Hypergeometric distribution
  Question 18
- The mean of binomial distribution is A npq
  B np
  C npq
  –
  –
  –
  √
  D np
  –
  –
  √
  E nq
  –
  –
  √
  Question 19
- In hypergeometric distribution, the trials are A Independent
  B Dependent
  C Collectively Exhaustive
  D None
  Question 20
- The successive trials are with replacement in A Hypergeometric distribution
  B Binomial distribution
  C Geometric distribution
  D None of above
  Total Area under the curve in probability of density function is A 0
  B -1
  C 1
  D Infinity
  Question 2
- For a random variable X, E(X) is A Harmonic Mean (HM)
  B Geometric Mean (GM)
  C Arithmetic Mean (AM)
  D Non
  Question 3
- Probability distribution of a random variable is also known as A Probability
  B Probability Function
  C Distribution Function
  D Probability Distribution
  E Probability Density Function
  Question 4
- Probability of occurrence of an event lies between A -1 and 0
  B 0 and 1
  C -1 and 1
  D exactly 1
  Question 5
- What is the probability that a ball drawn at random from a jar? A 0.1
  B 1

C 0.5
D 0
E Cannot be determined from given information
Question 6

- For distribution Function F(X), F($-\infty$)=0 and
F(∞)=?A 0
B -1
C 1
Question 7

- If C is non-random variable, the E(C) isA Zero
B C
C 1
D 2
E None
Question 8

- A discrete probability distribution may be represented byA A table
B A graph
C A mathematical Equation
D All of these
Question 9

- For a probability density function (pdf), the probability of a single point isA 1
B 2
C 0
D Constant
Question 10

- The probability function is alwaysA Negative
B Non Negative
C Positive
D None
Question 11

- The distribution function F(X) is represented by A P(X=x)
B P(X
C P(X>x)
D P(X≤x)

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- # Statistics Mcqs Test

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- **Statistics Mcqs Test**

- (1) A cricket captain wins the toss for three consecutive matches. What is the probability that the will call correctly for the fourth match?
(a) 1/16
(b) 1/8
(c) 1/4

(d) 1/2
(e) None of these

- (2) A and B are two independent events. The probability of A is ¼ and B is 1/3. The neither probability of A nor B is:
(a) 5/12
(b) 1/3
(c) 3/4
(d) 11/12
(e) None of these

- (3) Which one of the following statement is not true?
(a) Mutually exclusive events are statistically dependent.
(b) Complementary events have probabilities that sum to 1.
(c) Opposite events, are statistically independent.
(d) An experiment's elementary events are collectively exhaustive and mutually exclusive.
(e) None of these

- (4) For a Poisson distribution with standard deviation equals to 2 then mean of the Poisson distribution equals to:
(a) 0
(b) 1
(c) 2
(d) 4
(e) None of these

- (5) Which of the following could never by described by the binomial distribution?
(a) The number of defective items produced by an assembly process.
(b) The amount of water used daily by a single household.
(c) The number of people in a class who can answer a particular question correctly.
(d) All of these
(e) None of these

- (6) The area under the normal curve within two standard deviation of the mean is:
(a) 68.26 %
(b) 95.44 %
(c) 99.73 %
(d) 99.99 %
(e) None of these

- (7) What information is given by a value of the coefficient of determination?
(a) Strength of relationship
(b) Both strength and direction of relationship
(c) Neither strength nor direction of relationship
(d) Direction of relationship only
(e) None of these

- (8) A complete list of all the sampling units is called:
(a) stratum size
(b) unit list
(c) sampling frame
(d) sample design
(e) None of these

- (9) If we decrease Type-I error, Type-II error:
(a) Remains same
(b) Increases
(c) Decreases
(d) None of these

- (10) To test of equality of means of paired observations, we use:
  (a) Chi-Square test
  (b) t-test
  (c) F-test
  (d) Z-test
  (e) None of these