

# Statistics Mcqs Paper 2013

Posted by Muneer Hayat ON 4 September 2013, 5:48 am

## 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
- 
- 3. In Poisson distribution:
  - (a) Mean > Variance (b) Mean < Variance (c) Mean = Variance (d) None of these
- 
- 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
- 
- 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
- 
- 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
- 
- 7. The complete list of the sampling units is called:
  - (a) Sampling Frame (b) Unit List (c) Sample Space (d) None of these
- 
- 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
- 
- 9. If  $X$  has binomial distribution with parameter  $p$  and  $n$  then the variance of  $X$  is:
  - (a)  $n pq$
  - (b)  $np$  (c)  $n^2 p$  (d)  $n^2 pq$
- 
- 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
- 
- 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

- (d) None of these
- 
- 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
- 
- 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
- 
- 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
- 
- 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**

• Posted by [Muneer Hayat](#) ON 21 July 2013, 4:49 am

## • **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  $\frac{26}{52} = \frac{1}{2}$   
B  $\frac{13}{52}$   
C  $\frac{20}{52}$   
D  $\frac{12}{52}$   
Question 2
- A listing of the possible outcomes of an experiment and their corresponding probability is called  
A 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  $\frac{4}{36}$   
B  $\frac{13}{36}$   
C  $\frac{21}{36}$   
D  $\frac{15}{36}$

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  $\frac{4}{52}$   
B  $\frac{1}{26}$   
C  $\frac{8}{52}$   
D  $\frac{1}{169}$

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 exclusive events

D Also called Prior probability

Question 13

- 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 is A  $\frac{nk}{N}$   
B  $\frac{N-k}{n}$   
C  $\frac{nN}{k}$   
D  $\frac{n+k}{N}$

Question 10

- In binomial distribution  $n=6$  and  $p=0.9$ , then the value of  $P(X=7)$  is A One  
B Less than zero  
C Zero  
D More than zero

Question 11

- In a binomial probability distribution it is impossible to find A  $P(X < 0)$   
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 when A  $p=0.5$   
B  $p < 0.5$   
C  $p > 0.5$   
D  $p = 1$

E None of these

Question 13

- Each trial in Binomial distribution has A 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 is A  $\frac{1}{4}$   
B  $\frac{1}{2}$   
C  $\frac{1}{16}$   
D 1  
E 0

Question 15

- Which of the following is not the property of binomial distribution A  $n$  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 always A 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 inA Binomial distribution  
B Geometric distribution  
C Sampling distribution  
D Hypergeometric distribution

Question 18

- The mean of binomial distribution isA  $npq$   
B  $np$   
C  $npq$   
—  
—  
—  
√  
D  $np$   
—  
—  
√  
E  $nq$   
—  
—  
√

Question 19

- In hypergeometric distribution, the trials areA Independent  
B Dependent  
C Collectively Exhaustive  
D None

Question 20

- The successive trials are with replacement inA Hypergeometric distribution  
B Binomial distribution  
C Geometric distribution  
D None of above
- Total Area under the curve in probability of density function isA 0  
B -1  
C 1  
D Infinity

Question 2

- For a random variable X,  $E(X)$  isA Harmonic Mean (HM)  
B Geometric Mean (GM)  
C Arithmetic Mean (AM)  
D Non

Question 3

- Probability distribution of a random variable is also known asA Probability  
B Probability Function  
C Distribution Function  
D Probability Distribution  
E Probability Density Function

Question 4

- Probability of occurrence of an event lies betweenA -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  $F(\infty)=?$ 
  - A 0
  - B -1
  - C 1

Question 7

- If C is non-random variable, the  $E(C)$  is
  - A Zero
  - B C
  - C 1
  - D 2
  - E None

Question 8

- A discrete probability distribution may be represented by
  - A 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 is
  - A 1
  - B 2
  - C 0
  - D Constant

Question 10

- The probability function is always
  - A 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  $P(X\leq x)$

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## • Statistics Mcqs Test

- Posted by [Muneer Hayat](#) on 2 January 2015, 12:28 am

### • 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  $1/4$  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 be 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

Regard

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