

Ques1 Bernoulli random variables take (only) the values 1 and 0.

Answer: True

Ques2 Which of the following theorem states that the distribution of averages of iid variables, properly normalized, becomes that of a standard normal as the sample size increases?

Answer: The central limit theorem (CLT).

Ques3 Which of the following is incorrect with respect to use of Poisson distribution?

Answer: Modeling bounded count data.

Ques4 Point out the correct statement.

- a) The exponent of a normally distributed random variables follows what is called the log- normal distribution
- b) Sums of normally distributed random variables are again normally distributed even if the variables are dependent
- c) The square of a standard normal random variable follows what is called chi-squared distribution
- d) All of the mentioned

Answer: All of them (Option – d)

Ques5 _____ random variables are used to model rates.

Answer: Poisson

Ques6 Usually replacing the standard error by its estimated value does change the CLT.

Answer: False

Ques7 Which of the following testing is concerned with making decisions using data?

Answer: The Null Hypothesis

Ques8 Normalized data are centered at _____ and have units equal to standard deviations of the original data.

Answer: 0

Ques9 Which of the following statement is incorrect with respect to outliers?

- a) Outliers can have varying degrees of influence
- b) Outliers can be the result of spurious or real processes
- c) Outliers cannot conform to the regression relationship
- d) None of the mentioned

Answer: Outliers cannot conform to the regression relationship.