

## **STATISTICS WORKSHEET-1**

### **Q1 to Q9 have only one correct answer.**

Choose the correct option to answer your question.

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

- a) True b) False

**ANSWER – A) TRUE**

**2. 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.?**

- a) Central Limit Theorem b) Central Mean Theorem c) Centroid Limit Theorem

**ANSWER- A) CENTRAL LIMIT THEOREM**

**3. Which of the following is incorrect with respect to use of Poisson distribution?**

- a) Modeling event/time data b) Modeling bounded count data c) Modeling contingency tables d) All of the mentioned

**ANSWER- b) Modeling bounded count data**

**4. 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 D) ALL OF THE MENTIONED**

**5. \_\_\_\_\_ random variables are used to model rates.**

- a) Empirical b) Binomial c) Poisson d) All of the mentioned

**ANSWER:- C) POISSON**

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

A. TRUE      B. FALSE

**ANSWER :- B) FALSE**

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

a) Probability b) Hypothesis c) Causal d) None of the mentioned

**ANSWER:- B) HYPOTHESIS TESTING**

8. Normalized data are centered at \_\_\_\_\_ and have units equal to standard deviations of the original data.

a) 0 b) 5 c) 1 d) 10 9

**ANSWER -A) 0**