

STATISTICS WORKSHEET-5

Q1 to Q10 are MCQs with only one correct answer. Choose the correct option.

1. Using a goodness of fit, we can assess whether a set of obtained frequencies differ from a set of frequencies. a) Mean b) Actual c) Predicted d) Expected

Ans: d) Expected

2. Chi-square is used to analyse a) Score b) Rank c) Frequencies d) All of these

Ans: c) Frequencies

3. What is the mean of a Chi-Square distribution with 6 degrees of freedom? a) 4 b) 12 c) 6 d) 8

Ans: c) 6

Explanation-By the property of Chi Square distribution, the mean corresponds to the number of degrees of freedom. Degrees of freedom = 6. Hence mean = 6

4. Which of these distributions is used for a goodness of fit testing? a) Normal distribution b) Chi-square distribution c) Gamma distribution d) Poisson distribution

Ans: b) Chi- square distribution

5. Which of the following distributions is Continuous a) Binomial Distribution b) Hypergeometric Distribution c) F Distribution d) Poisson Distribution

Ans: c) F Distribution

Explanation: Binomial, Poisson and Hyper geometric distributions are Discrete Distributions. Only F- Distribution is Continuous Distribution in the given Distribution

6. A statement made about a population for testing purpose is called? a) Statistic b) Hypothesis c) Level of Significance d) TestStatistic

Ans: b) Hypothesis

Explanation: Hypothesis is a statement made about a population in general. It is then tested and correspondingly accepted if True and rejected if False.

7. If the assumed hypothesis is tested for rejection considering it to be true is called? a) Null Hypothesis b) Statistical Hypothesis c) Simple Hypothesis d) Composite Hypothesis

Ans: a) Null Hypothesis

8. If the Critical region is evenly distributed then the test is referred as? a) Two tailed b) One tailed c) Three tailed d) Zero tailed

Ans: a) Two tailed

Explanation: In two tailed test the Critical region is evenly distributed. One region contains the area where Null Hypothesis is accepted and another contains the area where it is rejected.

9. Alternative Hypothesis is also called as? a) Composite hypothesis b) Research Hypothesis c) Simple Hypothesis d) Null Hypothesis

Ans: b) Research Hypothesis

Explanation: Alternative Hypothesis is also called as Research Hypothesis. If the Null Hypothesis is false then Alternative Hypothesis is accepted.

10. In a Binomial Distribution, if 'n' is the number of trials and 'p' is the probability of success, then the mean value is given by a) np b) n

Ans: a) np