FLIP ROBO

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

   ## ANSWER: Expected

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

   ## ANSWER: Frequencies

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

   ### ANSWER: 6

4. Which of these distributions is used for a goodness of fit testing?
   a) Normal distribution
   b) Chisqared distribution
   c) Gamma distribution
   d) Poission distribution

   ANSWER: Chisquared distribution

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

   ANSWER: F distribution

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

Answer: 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

Answer: Null Hypothesis
Explanation: If the assumed hypothesis is tested for rejection considering it to be true is called Null Hypothesis. It gives the value of population parameter.

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

Answer: Two

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

Answer: Research Hypothesis

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

FLIP ROBO

WORKSHEET

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

Answer: np

Explanation: For a discrete probability function, the mean value or the expected value is given by

Mean $(\mu)=\sum_{nx=0}xp(x)$

For Binomial Distribution $P(x)={}^{n}C_{x}\ p^{x}\ q^{(n-x)}$, substitute in above equation and solve to get

μ = np.