# WORKSHEET

STATISTICS – WORKSHEET 3

**Q1 to Q15 are MCQs with one or more than one correct answer. Choose all the correct options.**

1. Using a goodness of fit, we can assess whether a set of obtained frequencies differ from a set of frequencies.
   1. Mean B) Actual

C) Predicted D) Expected

**Answer:** D) Expected

1. Chi-square is used to analyse:
   1. Score B) Rank

C) Frequencies D) All of these

**Answer:** C) Frequencies

1. What is the mean of a Chi Square distribution with 6 degrees of freedom? A) 4 B) 12

C) 6 D) 8

**Answer:** C) 6

1. Which of these distributions is used for a testing hypothesis?
   1. Normal distribution B) Chi - squared distribution

C) Gamma distribution D) Poisson distribution

**Answer:** A) Normal distribution, B) Chi- squared distribution, C) Gamma distribution, D) Poisson distribution

1. Which of the following distributions is Continuous?
   1. Binomial Distribution B) Hyper-geometric Distribution

C) F-Distribution D) Poisson Distribution

**Answer:** C) F-Distribution

1. A statement made about a population for testing purpose is called?
   1. Statistic B) Hypothesis

C) Level of Significance D) Test-Statistic

**Answer:** B) Hypothesis

1. If the assumed hypothesis is tested for rejection considering it to be true is called?
   1. Null Hypothesis B) Statistical Hypothesis

C) Simple Hypothesis D) Composite Hypothesis

**Answer:** A) Null Hypothesis

1. If the Critical region is evenly distributed, then the test is referred as?
   1. Two tailed B) One tailed

C) Three tailed D) Zero tailed

**Answer:** A) Two tailed

1. Alternative Hypothesis is also called as?
   1. Composite hypothesis B) Research Hypothesis

C) Simple Hypothesis D) Null Hypothesis

**Answer:** B) Research Hypothesis

## 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

* 1. np B) n

C) p D) np(1-p)

**Answer:** A) np

1. Binomial Distribution is a .
   1. Continuous distribution B) Discrete distribution

C) Irregular distribution D) Not a Probability distribution

**Answer:** B) Discrete distribution

1. If ‘p’, ‘q’ and ‘n’ are probability pf success, failure and number of trials respectively in a Binomial Distribution, what is its Standard Deviation?
   1. √np B) √pq

C) (np)2 D) √npq

**Answer:** D) √npq

1. A Null Hypothesis has Level of Significance 9%. For what values of Level of Significances it will be rejected?

A) 0.99 B) 0.009

C) 0.099 D) 0.9

**Answer:** B) 0.009

1. The range of Level of Significance lies between .
   1. -∞ and 0 B) -∞ and ∞

C) 0 and ∞ D) 0 and 1

**Answer:** D) 0 and 1

1. The effect of rejection of a hypothesis with decrease in sample size .
   1. decreases B) increases

C) remains constant D) fluctuates

**Answer:** B) increases