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

Chi square test is used to analyse the observed and expected frequency.

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

By the property of chi square distribution, the mean corresponds to the number of degree 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 squared distribution
   c) Gamma distribution
   d) Poission distribution

Ans) b) chi square distribution.

Chi square distribution as it determines how well the distribution found through the values fits the empirical 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 is continuous distribution. Binomial , poission and hypergeometric distributions are discrete distributions.

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

Ans) b) Hypothesis

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

In the 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

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

A binomial distribution's expected value or mean is calculated by multiplying the number of trails (n) by probability of successes (p) or np.