

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.
 A) Mean
 B) Actual
 C) Predicted
 D) Expected
ANS D
2. Chi-square is used to analyse:
 A) Score
 B) Rank
 C) Frequencies
 D) All of these
ANS C
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
4. Which of these distributions is used for a testing hypothesis?
 A) Normal distribution
 B) Chi - squared distribution
 C) Gamma distribution
 D) Poisson distribution
ANS B
5. Which of the following distributions is Continuous?
 A) Binomial Distribution
 B) Hyper-geometric Distribution
 C) F-Distribution
 D) Poisson Distribution
ANS A
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
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
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
9. Alternative Hypothesis is also called as?
 A) Composite hypothesis
 B) Research Hypothesis
 C) Simple Hypothesis
 D) Null Hypothesis
ANS B
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
 C) p
 D) np(1-p)
ANS A
11. Binomial Distribution is a _____.
 A) Continuous distribution
 B) Discrete distribution
 C) Irregular distribution
 D) Not a Probability distribution
ANS A
12. If 'p', 'q' and 'n' are probability of success, failure and number of trials respectively in a Binomial Distribution, what is its Standard Deviation?
 A) \sqrt{np}
 B) \sqrt{pq}
 C) $(np)^2$
 D) \sqrt{npq}
ANS D
13. A Null Hypothesis has Level of Significance 9%. For what values of Level of Significance it will be rejected?
 A) 0.99
 B) 0.009
 C) 0.099
 D) 0.9

ANS B

14. The range of Level of Significance lies between_____.
- | | |
|--------------------|---------------------------|
| A) $-\infty$ and 0 | B) $-\infty$ and ∞ |
| C) 0 and ∞ | D) 0 and 1 |

ANS D

15. The effect of rejection of a hypothesis with decrease in sample size_____.
- | | |
|---------------------|---------------|
| A) decreases | B) increases |
| C) remains constant | D) fluctuates |

ANS B
