

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) 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

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) Chi - squared distribution

5. Which of the following distributions is Continuous?
- | | |
|--------------------------|---------------------------------|
| A) Binomial Distribution | B) Hyper-geometric Distribution |
| C) F-Distribution | D) Poisson Distribution |

Ans: C) F-Distribution

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

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

9. Alternative Hypothesis is also called as?

- A) Composite hypothesis
- C) Simple Hypothesis

- B) Research Hypothesis
- D) Null Hypothesis

Ans: B) Research Hypothesis

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
- C) p

- B) n
- D) np(1-p)

Ans: A) np

11. Binomial Distribution is a _____.

- A) Continuous distribution
- C) Irregular distribution

- B) Discrete distribution
- D) Not a Probability distribution

Ans: B) Discrete distribution

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}
- C) $(np)^2$

- B) \sqrt{pq}
- D) \sqrt{npq}

Ans: D) \sqrt{npq}

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

- A) 0.99
- C) 0.099

- B) 0.009
- D) 0.9

Ans: 0.09

14. The range of Level of Significance lies between _____.

- A) $-\infty$ and 0
- C) 0 and ∞

- B) $-\infty$ and ∞
- D) 0 and 1

Ans: D) 0 and 1

15. The effect of rejection of a hypothesis with decrease in sample size _____.

- A) decreases
- C) remains constant

- B) increases
- D) fluctuates

ANS: B) increases
