

BA5106: Statistics for Management

Two Mark Questions with Answer

Unit-IV NON-PARAMETRIC TESTS

1. Write the formula for Chi-Square test of single standard deviation

A Chi-square ( $X^2$ ) statistic is used to investigate whether distributions of categorical variables differ from one another. Basically, categorical variable yield data in the categories and numerical variables yield data in numerical form.

2. Mention the uses of Chi-Square test.

Chi-Square test is used to find out whether one or more attributes are associated or not. Through the test we can find out the deviations between observed values are expected values.

3. Define rank sum system.

It is used to determine whether two independent samples have been drawn from the same population.

4. Mention advantages of non parametric tests.

- Data are roughly scaled.
- When quick and preliminary data analysis needed.
- When assumptions of a competing distribution tied.

5. Working rule framed in Mann-Whitney test.

- Set null hypothesis.
- Combine all samples in array and arrange.
- Find the ranks.
- Calculation of U test.

6. Write about Mann-Whitney test.

It is used to determine whether two independent samples have been drawn from the same population.

7. Explain sign test.

Sign test for paired data, in these tests positive and negative signs are substituted for quantitative values.

8. When Kruskal Wallis test is used.

It generalizes the analysis of variance, to enable us to dispense with the assumption that the population are normally distributed.

9. Define one sample test.

It is a method to determine the randomness with which the sample items have been selected.

10. Mention properties of linear correlation co-efficient.

- Correlation co-efficient lies between -1 to 1
- Correlation coefficient is independent of the change of origin and scale.
- It Is the geometric mean of two regression co-efficient.

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