

MA RURAL DEVELOPMENT
Third Semester
STATISTICAL ANALYSIS & COMPUTER APPLICATION
(MRD - 12)

Duration: 3Hrs.

Full Marks: 70

Part-A (Objective) =20
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins.

Marks: 50

Answer the following questions:

1. Define MIS. What are the components of an Information system? Discuss the importance of IT in Rural Development. (3+3+4=10)
2. What are the features of statistics? State the limitations of statistics. (5+5=10)
3. Following are the ages of participants attended SHG workshop.

5	6	3	7	5	6	9	11	13	12	5	6
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What is the mode of data set?

What is the mean of data set? (5+5=10)

4. A random sample of 10 bags of fertilizers are found to have 45, 49, 50, 49, 44, 52, 48, 45, 46, 45. Test at 5% level of significance whether the average packing weight can be taken as 50 kg? (10)
5. Calculate Karl pearson Coefficient of correlation from the following data: (10)

Year	1985	1986	1987	1988	1989	1990	1991	1992
Index of Production	100	102	104	107	105	112	103	99
Number of unemployed	15	12	13	11	12	12	19	26

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Duration: 20 minutes

Marks – 20

(PART A- Objective Type)

I. Answer the following:

1×20=20

1. The coefficient of variation measures variability in a data relative to the size of the arithmetic mean. **True/False**
2. Which of the following statistics is not a measure of central tendency?
 - a. Arithmetic mean
 - b. Median
 - c. Mode
 - d. Range
3. Which of the following statements about the median is not true?
 - a. It is more affected by extreme values than the arithmetic mean.
 - b. It is a measure of Central tendency.
 - c. It is equal to Q2.
 - d. It is equal to the mode in bell-shaped normal distribution.
4. If a set of data is perfectly symmetrical, the arithmetic mean must be identical to the median. **True/False**
5. The quantitative characteristic that varies from unit to unit is called
 - a. Data
 - b. Variable
 - c. Hypothesis
 - d. Dispersion
6. Data arranged according to time of occurrence is known as _____.
(Attribute/Series)
7. Tabulation presents the data in a minimum space. **True/False**
8. Statistics deals with qualitative data. **True/False**
9. When constructing a frequency distribution, classes should be arranged in such a way that they are of equal width. **True/False**
10. t distribution is _____ probability distribution. (Continuous/Discrete)

11. If we observe or record numerical features of an individual or a population for different points or intervals of time, the set of observations forms a:
- a. Regression
 - b. Correlation
 - c. Time Series
 - d. Central tendency
12. Data + _____ + purpose = Information
13. Understanding + Communication = _____
14. TPS stands for
- a. Transaction Processing System
 - b. Transaction Process and Systems
 - c. Tele Processing Systems
 - d. Tele Process and Systems
15. If the Calculated value of t test is higher than tabulated value, H_0 is rejected. **True/False**
16. Which of the following test is used for comparing the mean of a sample to some hypothesized mean for the population?
- a. z test
 - b. t test
 - c. χ^2 test
 - d. All of them
17. Degree of freedom is calculated as:
- a. n-1
 - b. n+1
 - c. (n-1) (n+1)
 - d. None of these
18. The value of Karl Pearson's Correlation Coefficient lies between -1 and 1. **True/False**
19. Which of the following diagram tells us the direction in which the observed values are related?
- a. Scatter diagram
 - b. Pie chart
 - c. Bar chart
 - d. None of these
20. Method of Moving averages is related to:
- a. Regression
 - b. Correlation
 - c. T test
 - d. Time series
