

MA RURAL DEVELOPMENT
THIRD SEMESTER
STATISTICAL ANALYSIS & COMPUTER APPLICATION
MRD-302

(Use separate answer scripts for Objective & Descriptive)

Duration: 3 hrs.

Full Marks: 70

[PART-A : Objective]

Time: 20 min.

Marks: 20

Choose the correct answer from the following:

1×20=20

1. A set of value when arranged in the ascending or descending order of magnitude to find out the middle most value is:
a. Mean
b. Median
c. Mode
d. Standard Deviation
2. The difference between highest value and the lowest value is known as:
a. Standard deviation
b. Range
c. Weighted mean
d. Arithmetic mean
3. The statistical tool with the help of which we are in a position to estimate the unknown values of one variable from the known values of another variable is called:
a. Correlation
b. Regression
c. Standard deviation
d. Dispersion
4. Which of the following statistics is not a measure of central tendency?
a. Arithmetic mean
b. Mode
c. Median
d. Q3
5. Classification is the process of arranging data in:
a. Attributes.
b. Different rows and columns.
c. Grouping of related facts in different classes.
d. None of these.
6. Who defined statistics as the science of estimates and probabilities?
a. A L Boddington
b. Croxton and Cowden
c. Horace Secrit
d. Pannerselvan
7. Census conducted by Govt of India is an example of..... data.
a. Primary
b. Secondary
c. Both a & b
d. None of these
8. To draw a histogram frequency distribution should be.....
a. Discrete
b. Continum
c. Both
d. None of these

9. Tabulation is a process of data representation in..... method.
- a. Diagrammatic b. Graphical
c. Tabular d. None of these
10. Simple Bar diagram is drawn for..... characteristics.
- a. Single b. Multiple
c. Both d. None
11. Chi square test is a..... hypothesis testing.
- a. Non parametric b. Parametric
c. Logit d. None of these
12. 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
13. If there are 'n' observations the degrees of freedom is calculated as:
- a. n-1 b. n+1
c. (n-1)(n+1) d. None of these
14. Method of Moving averages is related to:
- a. Regression b. Correlation
c. T test d. Time series
15. 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
16. The value of Karl Pearson's Correlation Coefficient lies between.....
- a. 0 and 1 b. -1 and 0
c. -1 and 1 d. None of these
17. When constructing a frequency distribution, classes should be arranged in such a way that they are of..... width.
- a. Equal b. Not equal
c. Both d. None of these
18. Data arranged according to time of occurrence is known as.....
- a. Attribute b. Series
c. Chronologic d. Both b and c
19. Statistics deals with.....
- a. Qualitative b. Quantitative
c. Both a and b d. None of these
20. A distribution that is more peaked than normal is called.....
- a. Platykurtic b. Mesokurtic
c. Leptokurtic d. All of these

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(PART-B :Descriptive)

Time: 2 hrs. 40min.

Marks: 50

[Answer question no.1 & any four (4) from the rest]

1. Define Statistics as defined by Prof Horace Secrit. State the characteristics of statistics. 3+7=10
2. Calculate the mean and median from the following data: 10
- | Marks | No. of students |
|-------|-----------------|
| 10-20 | 6 |
| 20-30 | 10 |
| 30-40 | 15 |
| 40-50 | 8 |
3. Compute the standard deviation (σ) from the series: 10
72, 54, 87, 78, 98, 64
4. Following are the attendance of students in a class: 10
- | Days of Week | Monday | Tuesday | Wednesday | Thursday | Friday |
|-----------------|--------|---------|-----------|----------|--------|
| No of absentees | 66 | 57 | 54 | 48 | 75 |
- Test at .050 level of significance whether absenteeism is uniformly distributed over the week or not.
5. Write notes on: Mean, Median and Mode as measures of Central Tendency. 10
6. Compute the Rank Co-relation co-efficient (r) from the series: 10
X = 82, 81, 80, 79, 78
Y = 22, 35, 75, 63, 48
7. Enumerate the Time series Analysis. 10
8. Calculate Coefficient of variation: 10
59, 70, 75, 82

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