MA/M.Sc. GEOGRAPHY
THIRD SEMESTER
QUANTITATIVE TECHNIQUES
MGE – 302 DMN [SPECIAL REPEAT]
[USE OMR FOR OBJECTIVE PART]

SET A

Duration: 1:30 hrs.

Full Marks: 35

(Objective)

Time: 15 mins.

Marks: 10

Choose the correct answer from the following:

1X10=10

1. What is the purpose of descriptive statistics?

    a. Make predictions about future events

    b. Summarize and describe main features of a dataset

    c. Test hypotheses about population parameters

    d. Determine cause-and-effect relationships

2. In a normal distribution, approximately what percentage of data falls within one standard deviation of the mean?

    a. 25%

    b. 50%

    c. 68%

    d. 95%

3. Which measure of central tendency is affected by outliers?

    a. Mean

    b. Median

    c. Mode

    d. Range

4. What is the median of the following data set: {3, 7, 2, 8, 5}?

    a. 3

    b. 5

    c. 7

    d. 8

5. In statistics, what does the term "range" refer to?

    a. The average of a data set

    b. The difference between the largest and smallest values in a data set

    c. The most frequently occurring value in a data set

    d. The spread of data around the mean

6. A rectangular array of number in the form of m columns and n rows is called a matrix of order

    a. m by n

    b. n by m

    c. m plus n

    d. None of above

7. Which statement is true for Identity matrix?

    a. All elements are 0

    b. All elements are 1

    c. All diagonal elements are 1

    d. All diagonal elements are same

8. Relationship of more than three variables are studied in
   a. Multiple correlation
   b. Complex Correlation
   c. Total Correlation
   d. All of above

9. How well a certain independent variable can predict a dependent variable is obtained from
   a. Correlation
   b. Regression
   c. Standard deviation
   d. None of above

10. Which is the correct statement?
    a. Mean deviation is less sensitive to outliers than standard deviation.
    b. Two matrices are equal if number of rows and columns are equal
    c. t test assumes data are not normally distributed
    d. Paired t test is used to compare the means of two different groups of samples.

-- --- --

(__Descriptive__)

[Answer question no.1 & any two (2) from the rest]

1. Write about the need of Quantification in Geography? Differentiate   5
   between Discrete and Continuous variables?

2. Define Measures of Central Tendencies? Calculate the Median   5+5=10
   height of 51 girls from the data given below:

Heights in cm	No. of Girls
Less than 140	4
140-145	11
145-150	29
150-155	40
155-160	46
160-165	51

3. What is t – test? Write about assumptions and types of t- test.   2+8=10

4. What is regression? Write about different types of regression.   2+8=10

5. a. Find the standard deviation of 210, 240, 250, 260, 220, 230, and   5+5=10
      270.
   b. Find the t-test value for the following two sets of values: 7, 2, 9,
      8 and 1, 2, 3, 4?

== *** ==