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Your Roll No.....

Sr. No. of Question Paper : **6826**
Unique Paper Code : **61013924**
Name of the Paper : **Statistical Software Package**
Name of the Course : **Bachelor of Management Studies (BMS),
2023 LOCF**
Semester : **IV**
Duration : **2 Hours**
Maximum Marks : **50**



Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
 2. Attempt 5 questions in all.
 3. All questions carry equal marks.
 4. Attempt parts of question together.
 5. Answer the questions based on SPSS or any other equivalent software used for instruction.
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1. Explain the assumptions of executing a linear regression model using a statistical software package. What is the difference between multiple linear regression and logistic regression? Explain with the help of an example.
 2. How is one-way ANOVA different from two-way ANOVA? Taking a hypothetical example, set up the hypothesis and explain how would you perform and interpret the above statistical procedures through a software.

P.T.O.

3. What do you mean by Factor Analysis? Explain briefly the following terms in context of factor analysis procedure:
 - (i) Eigenvalue
 - (ii) KMO and Bartlett's test of sphericity
 - (iii) Scree Diagram
 - (iv) Total Variance Explained

4. "Discriminant analysis is a parametric analysis that helps to determine which of the independent variables will discriminate between the groups". Explain with the help of a suitable example. State the assumptions and procedure for executing a discriminant analysis.

5. Explain the concept of cluster analysis. What type of data is required to perform cluster analysis? What is the difference of performing cluster analysis using k-means method and hierarchical method?

6. Answer the following briefly with the help of an example in the context of a SPSS datafile.
 - (i) Select cases
 - (ii) Split file
 - (iii) Compute variable
 - (iv) Exclude cases listwise and pairwise

7. "A chi-squared test of independence attempts to check whether two categorical variables are associated". Taking an example, set up a null and alternate hypothesis. State the path for running the tests. Describe the decision rule for accepting or rejecting the null hypothesis and drawing inference.