

M.Sc. - II (Computer Science) (NEP Pattern) Semester-IV
04MSCCS08 - Elective-IV Paper-V : R-Programming

P. Pages : 2

Time : Three Hours



GUG/S/25/16337

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagram and use supporting data whenever necessary .
 3. Avoid vague answer and write specific answer related to question.

Either :

1. a) What is vector? Explain how to create a vector with suitable example. 8
- b) Write a R program to get details of object in memory. 8

OR

- c) Explain how to define a matrix with suitable example. 8
- d) Write a R program to get sequence of numbers from 20-50 and find mean of numbers from 20-60 and find sum of numbers from 51-91. 8

Either :

2. a) Explain how to write a function with suitable example. 8
- b) Write a R program to multiply two vectors of integer type and length? 8

OR

- c) What is Basic Data visualization? Explain. 8
- d) Write a R program to select second element of a given nested list. 8

Either :

3. a) Explain simple linear regression with suitable example. 8
- b) Write a R program to merge two given list into one list. 8

OR

- c) What is Hypothesis testing? Explain. 8
- d) Write a R program to create an empty data frame. 8

Either :

4. a) Explain how can you use 3D plots for data visualization. 8
- b) What is customization? Explain advanced plot customization. 8

OR

- c) Explain how would you use subplots and multi axis plots. **8**
- d) Write a R program to concatenate two given factors in a single factor. **8**

5. Solve all the questions.

- a) What is E-notation? Explain. **4**
- b) What is Exception? Explain any one in detail. **4**
- c) Write a detail note on sampling distribution. **4**
- d) Give the importance of grammar of graphics in creating statistical graphics. **4**
