

B.Sc. First Year (Data Science) NEP Semester-II  
**BSCDS22 - R Programming**

P. Pages : 1

Time : Two Hours



**GUG/S/25/15262**

Max. Marks : 40

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1. a) What are the different data types in R? Explain with example. 4  
b) What is Comment? How do you add comments in R? Why are Comments important in R code. 4

**OR**

- c) Describe the Main features of R Programming. 4  
d) What are the variable in R? How do you assign a value to a variable in R. 4
2. a) What are the basic data structure in R? Describe them with example. 4  
b) Write the syntax of an if statement in R and explain how it works with an example. 4

**OR**

- c) What is assignment operator in R and how does it differ from other operators? 4  
d) What are the basic data structure in R? Describe them with example. 4
3. a) How do you create a list in R? Provide an example. 4  
b) List and explain any two special features that can be applied to matrices in R. 4

**OR**

- c) Explain how to create a matrix in R with an example. 4  
d) What are special functions in lists? Explain with an example. 4
4. a) What is recursion? Write a recursive function in R to find the factorial of a number. 4  
b) Differentiate between local and global variables in R with examples. 4

**OR**

- c) What is normalization? Perform min-max normalization on a numeric column in a dataset. 4  
d) What is the difference between base R graphics, lattice, and ggplot2? Give examples. 4
5. a) What is numeric data in R? 2  
b) What is vector in R? How do you declare and initialize a vector. 2  
c) What are actors in R? Explain with example. 2  
d) Write a simple function in R that adds two numbers and returns the result. 2

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