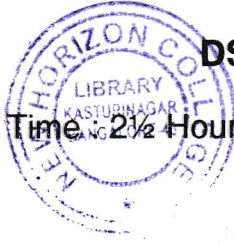**V Semester B.C.A. Degree Examination, December 2024/January 2025**
(NEP) (Freshers and Repeaters)
COMPUTER APPLICATIONS
DSC 14 : Statistical Computing and R Programming

Time : 2½ Hours

Max. Marks : 60

Instruction : *Answer all the Sections.*

SECTION – A

I. Answer **any 6** questions, **each** question carries **2** marks. (6×2=12)

1) List the assignment operator in R.

2) What are data frames ?

3) Mention any two output statements in R.

4) Write the syntax of while loop in R.

5) What is probability ?

6) What is the use of PDF ?

7) What is testing ?

8) What are errors ?

9) What is point-and-click ?

SECTION – B

II. Answer **any 4** questions, **each** question carries **6** marks. (4×6=24)

10) Explain the various features of the R program.

11) Write a note on basic plotting.

12) Write an R program that includes control structures.

13) Explain normal distribution in R.

14) Explain the concept of sampling distribution.

15) Write a note on 3D scatters plots.

SECTION – C

III. Answer **any 3** questions, **each** question carries **8** marks.   **(3×8=24)**

16) Write a note on :

    a) Matrices.   **4**

    b) Lists.   **4**

17) Explain the concept of user defined functions in R with an example.

18) Explain Bernoulli and Binomial functions in R.

19) Explain the different types of ANOVA techniques.

20) Write a note on :

    a) Simple Linear Regression.   **4**

    b) Representing and using colors.   **4**

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