

(FOR THE CANDIDATES ADMITTED

23UDA411

DURING THE ACADEMIC YEAR 2023-24 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS): POLLACHI

END-OF-SEMESTER EXAMINATIONS: MAY 2025

BSC CS WITH DA(SF)

MAXIMUM MARKS: 75

SEMESTER-IV

TIME : 3 HOURS

**PART - III**

**23UDA411-R PROGRAMMING**

**SECTION – A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.(K1)**

1. The primary R system is available from the \_\_\_\_\_  
a) CRAN b) CRWO c) GNU d) CRDO
2. What is the correct function to save R objects in a binary format?  
a) saveR() b) save() c) dump() d) export()
3. \_\_\_\_\_ is used for reading in saved workspaces?  
a) unserialize b) load c) get d) set
4. \_\_\_\_\_ is used for outputting a textual representation of an R object.  
a) dput b) dump c) dget d) dset
5. Which of the following method makes vector of repeated values?  
a) rep() b) data() c) view() d) read()

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES**

**(K2)**

6. Write any two features of R?
7. What is the use of dput()?
8. Define data frame.
9. Discuss Lexical scoping.
10. Write short notes on debugging of tools in R.

**SECTION – B**

**(5 X 5 = 25 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Summarize the different types of objects in R.  
(OR)  
b) Implicate names important for data structures in R, and how do you set them?
12. a) Infer the important arguments of `read.table()` for customizing data reading?  
(OR)  
b) Elucidate on File Connections.
13. a) Write a R program for Extracting Multiple Elements of a List with explanation.  
(OR)  
b) Discuss about Managing Data Frames with the dplyr package.
14. a) Illustrate the if -else next and break statement?  
(OR)  
b) Discuss about the **Scoping Rules of R**.

15. a)Describe Looping on the Command Line with example.

**(OR)**

- b)Illustrate how to profile R code using system time ()

**SECTION – C**

**(5 X 8 = 40 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K4 (Or) K5)**

16. a)How do you enter and evaluate expressions in R? Give some best practices for interactive use of R.

**(OR)**

- b)Interpret the Data frames in R with example.

17. a)List the common functions used for reading and writing data in R Explain with example.

**(OR)**

- b)Explicate dput() and dump()with example program

18. a)Implicate Subsetting R Objects with example program.

**(OR)**

- b)Describe Dates and Times in R and its operations.

19. a)Discuss for Loops, while Loops ,Repeat Loops with example.

**(OR)**

- b)Explain briefly the Functions in R

20. a)Describe lapply(), sapply() ,split(),tapply() , apply() with suitable examples.

**(OR)**

- b)Explicate Simulation in R programming.

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Ethical paper