MAY 2025 **P/ID 78018/RMBB3**

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions in 50 words each

1. What is an object in R? Give one simple example.

2. Mention any one common way of installing R.

3. What is a function in R?

4. List any two commonly used methods to read data into R.

5. State any one of key difference between R and S-plus.

6. What is an R package (library)?

7. List the three looping constructs available in R.

8. Give any one example of a built-in function in R.

9. What is the use of read.csv( ) function?

10. List any two methods for importing data into R.

11. Define missing data.

12. Identify the purpose of the dev.off( ) function in saving plots in R

PART B — (5 × 6 = 30 marks)

Answer any FIVE questions in 250 words each.

13. Explain the structure of user-defined functions in R.

14. Outline the steps involved in obtaining and installing R.

15. How can objects be created and accessed in R? Explain it briefly.

16. Examine the key features of the lattice library in R.

17. Demonstrate how to display four different plots in a single graphics window Using par( ).

18. Describe the process of fitting and interpreting a linear regression model using lm( ).

19. Illustrate different methods of saving plots in R with suitable examples.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions in 500 words each.

20. Illustrate the different ways to input data into R using the keyboard, text files, and CSV files.

21. Compare while, and repeat loops with suitable examples.

22. Explain writing user-defined functions in R, including arguments and return values, with examples

23. Discuss the lattice plotting system in R. Explain its components and advantages with appropriate examples.

24. Develop an R program demonstrating model fitting using lm( ), glm( ), and lme( ) with suitable examples.

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