23U471

(Pages: 2)

Name :

Reg. No :

FOURTH SEMESTER B.Voc. DEGREE EXAMINATION, APRIL 2025

(CBCSS-UG)

(Regular/Supplementary/Improvement)

CC21U SDC4 DS13 - DATA SCIENCE WITH R PROGRAMMING

(Information Technology - Skill Component Course)

(2021 Admission onwards)

Time: 2 Hours

Maximum: 60 Marks

Credit: 3

Part A (Short answer questions) Answer *all* questions. Each question carries 2 marks.

- 1. What are the disadvantages of R Programming?
- 2. What are the functions which is used for merging of data frames horizontally and vertically in R?
- 3. What is the difference between dget() and source?
- 4. What are three operators that can be used to extract subsets of R objects?
- 5. Define mutate().
- 6. Explain the working of repeat loop in R.
- 7. What is ... Argument?
- 8. What is the difference between lapply and sapply?
- 9. Define object oriented programming in R.
- 10. What are the steps in exploratory data analysis?
- 11. What is classification?
- 12. Explain geoms in ggplot2.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer *all* questions. Each question carries 5 marks.

- 13. What are the different data objects in R?
- 14. Explain read.table() function.
- 15. Explain how do you create connections to a text file in R.
- 16. Explain vectorized operations. Briefly explain vectorized matrix operations.
- 17. Explain about dates and times in R.

- 18. What is the use of stringr package. Give some examples of the functions in Stringr.
- 19. Differentiate linear and logistic regression in R.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. The question carries 10 marks.

- 20. What are the different control structures in R?
- 21. What is clustering? What are the applications of clustering? Explain KMean clustering.

(1 × 10 = 10 Marks)
