II Semester BCA/BCA (DS) Degree Examination, June/July - 2025

(SEP Fresher's Scheme) COMPUTER APPLICATION

Statistical Computing and R Programming

Time: 3 Hours

Maximum Marks: 80

Instructions:

Answer All Sections.

SECTION-A

I. Answer any Ten questions, Each question carries 2 marks. (10×2=20)

- 1. Define package.
- 2. Mention any two data types used in R.
- 3. What is Data Frame in R?
- 4. Write the syntax of for loop in R.
- 5. What is built in function?
- 6. What is Exception Handling?
- 7. What is data Visualization?
- 8. Mention any two statistical function used in R Programming.
- 9. Define PDF and CDF.
- 10. What is hypothesis testing?
- 11. What is plotting?
- 12. Expand ANOVA.

SECTION-B

II. Answer any Six questions, Each question carries 5 marks.

 $(6 \times 5 = 30)$

- 13. Mention any five disadvantages of R program.
- 14. Explain relational operators available in R Programming.
- 15. Explain switch function in R Programming.
- 16. Explain any 5 string functions in R Programming with syntax and example.

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17. Explain the different functions used in Poisson Distribution.

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- 18. Write a R program to implement various statistical functions in R.
- 19. Explain one way ANOVA.
- 20. Write a note on plot customization.

SECTION-C

	Answer any Three questions, each question carries 10 marks.			(3×10=30)
	21.	a) b)	Explain Matrix and Array data structure in R Programming. Write a R program that includes various data types in R.	(5) (5)
	22.	a) b)	Explain user defined function with syntax and example. Explain any five mathematical functions used in R Programming.	(5) (5)
	23.	a) b)	Explain histogram and pie() functions with syntax and example. Explain the different functions used in Binomial Distribution.	(5) (5)
¥	24.	a) b)	Explain simple and multiple linear regression in statistical modelline Explain point and click coordinates interaction in R programming	