



End Term (Odd) Semester Examination December 2024

Name of the Course and semester: Bachelor of Computer Applications, III

Name of the Paper: R Programming

Paper Code: TBC 305(2)

Time: 3 hour

Maximum Marks: 100

Note:

- (i) All the questions are compulsory.
- (ii) Answer any two sub questions from a, b and c in each main question.
- (iii) Total marks for each question is 20 (twenty).
- (iv) Each sub-question carries 10 marks.

Q1.

(2X10=20 Marks)

- a. How can you calculating memory requirements for R object? Define all steps? [CO2]
- b. List and define reading and writing data files in R with suitable examples? [CO2]
- c. Explain package in R? Define any two package? Write a code for install and load packages? [CO1]

Q2.

(2X10=20 Marks)

- a. What is control structure? Explain all with examples? [CO3]
- b. How many types of functions in R? Explain summary functions with examples? [CO3]
- c. Write a code in R for use of function arguments and return values? [CO3]

Q3.

(2X10=20 Marks)

- a. If you want to relabelling the column names, which functions is used? Explain relabelling with column names and also index with examples? [CO4]
- b. Can you convert variable types? Define all types of conversion? [CO4]
- c. How can you visualize the data? Explain different types of plot in R? [CO4]

Q4.

(2X10=20 Marks)

- a. Differentiate with bar and histogram plotting with examples? [CO4]
- b. Explain about creating and adding of elements to the list give an example. How to convert list to matrix in R programming? [CO2]
- c. Write a R program to create a matrix, taking a given vector of numbers as input and define the column and row names. Display the matrix? [CO2]

Q5.

(2X10=20 Marks)

- a. Define all types of model in R with examples? [CO5]
- b. Write R program to demonstrate working with operators(arithmetic,logical,relational, miscellaneous and ,assignment operators). [CO2]
- c. How you can analysis of variance and comparison of model? Explain examples? [CO5]