Unit 1

5 Marks Questions

1. Explain different data structures.
2. Explain different matrix operation function in R?
3. Write about plot function.
4. Explain about Variables, constants and Data Types in R Programming.
5. How to create, name, access, merging and manipulate list elements? Explain with examples.

Unit 2

5 Marks Questions

1. Implement binary search tree with R.
2. Explain different types of operators in R.
3. Explain control statement in R.
4. Write a R program to implement quicksort.
5. Write about user defined functions in R with suitable example?
6. Explain about default values and in return statements in functions?
7. Write about Arithmetic and Boolean operators in R programming.

Unit 3

5 Marks Questions

1. What is cumulative sum, product, min and max?
2. List the uses R functions with example.
3. Explain about descriptive statistics? Write examples?
4. Write about the following with example a) Mean b) Mode c) Median d) Cumulative.
5. Write about different functions for statistical distribution.
6. Write about linear vector algebra operations.
7. Explain about Finding Stationary Distributions of Markov Chains.
8. Write about basic math in R?
9. Explain functions for accessing the keyboard and monitor, Reading and writing files.
10. Describe R functions for Reading a Matrix or Data Frame From a File .

Unit 4

5 Marks Questions

1. Write about Binomial Distribution.
2. Explain Anova test with example.
3. Fit a Binomial distribution to the following data x=0 1 2 3 4 5 f=2 16 28 12 9 3.
4. Write about Poisson Distributions.
5. Explain dnorm() function.
6. Write a R function to find sample covariance.
7. Fit a poisson distribution to the following data x=0,1,2,3,4,5f 3,9,12,27,4,1 Also test the

adequacy of model.

8. Calculate the coefficient of correlation to the following data X= 10 12 18 24 23 27 Y= 13 18 12 25 30 10
9. Fit a Binomial distribution to the following data x=0 1 2 3 4 5 f=2 16 28 12 9 3.

Unit 5

5 Marks Questions

1. Explain scatter plot and histograms with example in R.
2. How to plot multiple curves in same graph? Explain with example?
3. What is Box plot? Explain importance of boxplot with example
4. Explain about logistic regression.
5. Write about the following functions with example
   a) points () b) legend () c) text () d) locator ()