

## **R - Programming.**

1 mark

- 1) What is R programming?
- 2) who developed R programming and when?
- 3) define vector give example
- 4) define list give example
- 5) write any two features of R programming
- 6) define matrix, List various operations in R
- 7) how to create arrays R programming
- 8) what is data frame
- 9) what is visibility in R
- 10) write the syntax of cat and paste function
- 11) write the syntax for switch statement
- 12) list special values in R
- 13) mention any two functions of reading data from file in R
- 14) mention any two functions of writing data to the file in R
- 15) what is the use of Stop and warning function or exception in R
- 16) what is data visualisation
- 17) mention data visualisation functions in R
- 18) write four normal distribution functions available in R
- 19) write 4 Poisson distribution functions available in R
- 20) mention binomial distribution in R
- 21) what is student-T distribution
- 22) define sample testing
- 23) what is hypothesis testing
- 24) write 4 steps process of hypothesis testing
- 25) what are plotting function
- 26) define ANNOVA
- 27) define Regression
- 28) mention types of regression
- 29) define packages give exam
- 30) list out plotting functions

5marks

- 1) explain all the applications and features of R programming
- 2) how to create data frames in R give example
- 3) write a note on functions in R with syntax and example
- 4) write a note on for loop, while loop and repeat loop
- 5) explain different types of uniform distribution
- 6) explain Bernoulli distribution with example
- 7) write a note on one-way ANOVA
- 8) Explain 2 way ANOVA with example
- 9) explain specialized text notation
- 10) write a note on 3D Scatter plots
- 11) write a note on linear regression

- 12) explain R graphics functions plot ( ), boxplot( ), pie ( ), list ( ), scatterplot ( ) with neat diagram  
13) write a note on multiple regression

10 Marks

- 1) explain different types matrix operations with example
- 2) explain different types of arrays in R with an example
- 3) explain manipulation of data frames with an example
- 4) write a R program to demonstrate operators and control structure in R
- 5) write a R program for binary search tree
- 6) explain sampling distribution in R
- 7) explain writing data to text files and XL files with an example
- 8) write a note on student T distribution write
- 9) a note on binomial distribution
- 10) write a R program for different types data structures