

(FOR THE CANDIDATES ADMITTED

21UCS622

DURING THE ACADEMIC YEAR 2021 ONLY)

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : MAY 2024

B.Sc -COMPUTER SCIENCE(AIDED & SF)

MAXIMUM MARKS: 70

SEMESTER: VI

TIME : 3 HOURS

PART - III

21UCS622 – R PROGRAMMING

SECTION - A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS.

(K1)

1. R Functionality is divided into a number of_____.

(a) Packages (b) Functions (c) Domains (d) Classes

2. Which function takes a dim attribute the creates the required number of dimensions?

(a) Vector (b) Array (c) Matrix (d) List

3. Which of the following character skip during execution?

```
v <- LETTERS[1:6]
```

```
for ( i in v) {
```

```
  if (i == ""D"") {
```

```
    next
```

```
  }
```

```
  print(i)
```

```
}
```

(a) A (b) B (c) C (d) D

4. Function used for linear regression in R is _____

(a) lm(formula,data) (b) lr(formula,data) (c) lrm (formula,data) (d) regression(formula,data)

5. Which of the following function is used to crate a pie chart in r.?

(a) barplot() (b) pie() (c) hist() (d) plot()

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. What text editor to use for R?

7. What is Factor in R?

8. Write the statement to create a function in R.

9. Write the statement to calculate the mean in R.

10. Mention the statement to create line chart in R.

(CONT....2)

SECTION – B**(5 X 4 = 20 MARKS)****ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) List the Advantages of R Programming. **(OR)**
b) Paraphrase different types of Comments used in R with example.
12. a) Discuss Vectors in R Programming with suitable example. **(OR)**
b) How do you create a list in R? Discuss with example,
13. a) Write a R code to demonstrate the arithmetic operators. **(OR)**
b) How do you concatenate two strings? Explain with example
14. a) Outline how do you store data in R with example? **(OR)**
b) Write a R code to read a csv file and Excel file
15. a) Write a R program to create a bar chart. **(OR)**
b) Write a R code to create a Multiple line chart.

SECTION - C**(4 X 10 = 40 MARKS)****ANSWER ANY FOUR OUT OF SIX QUESTIONS****(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS
(FROM Qn. No : 17 to 21) (K4 (Or) K5)**

16. Explain the following with suitable example (i) read and write a binary file in R (ii) Read a XML file in R.
17. Illustrate the How do you Install, Uninstall, Loading and Unloading Packages in R with suitable example.
18. Describe data frame in R? Write the syntax to create data frame with example
19. Discuss the following with syntax and example (i) if statement (ii) if-else statement
20. Write a R code for calculate the following (i) Mean apply NA and Trim Option (ii) Median
21. Paraphrase the following with suitable example. (i) Box Plot (ii) Scatter Plot
