

(NO. OF PAGES: 2)

(FOR THE CANDIDATES ADMITTED

SUB CODE **21UIT6E1**

DURING THE ACADEMIC YEAR 2021 ONLY)

REG.NO.

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

END-OF-SEMESTER EXAMINATIONS : MAY 2024

B.Sc.(IT)

MAXIMUM MARKS: 70

SEMESTER : VI

TIME : 3 HOURS

PART - III

21UIT6E1 – R PROGRAMMING

SECTION - A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.(K1)

1. R is an _____ programming language.

- (a) closed source (b) GRC (c) open source (d) definite source

2. What is the output of the following code in R?

```
x<-c(1,2,3)    y<-c(4,5,6)    z<-x+y
```

- (a) An error message (b) The vector [5,7,9]
(c) The vector[1,2,3,4,5,] (d) The vector [1,4,9]

3. Consider the following code: **for(x 1:10)** .Which keyword is missing inside the for loop to output the numbers 1 to 10?

- (a) inside (b) list (c) in (d) seq

4. The ____ package makes working with dates a bit easier.

- (a) lubridate (b) cgraph (c) dplyr (d) caret

5. In the ggplot2, the “gg” stands for _____.

- (a) grammer for gateway (b) grammer for graphics
(c) grammer for gigabyte (d) grammer for quantile

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Define: vector.

7. What is dataframe?

8. What is the use of replicate () function?

9. Which package in R is used to read Excel file?

10. What is a Histogram in R?

(CONTD ... 2)

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

11. a) How to define and use variables in R? Explain.

(OR)

b) Explain the vectorized logical operators in R.

12. a) How to create lists in R? Explain.

(OR)

b) Explain passing functions to and from other functions.

13. a) Discuss vectorized if in R.

(OR)

b) How to load packages in R? Explain.

14. a) Determine the Data and Time classes.

(OR)

b) Write a short note on Time zones in R.

15. a) List and explain the sorting methods.

(OR)

b) Describe the three plotting systems.

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/ K5)**

16. Discuss about Matrices and arrays.

17. Summarize the classes and its functionalities.

18. Describe the functionality of factors in R.

19. Explain the looping structures in R.

20. Explain, how to read text files in R.

21. Examine the scatter plots in R.

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