

8. Write the LaTeX statements so that the output is a paragraph having five lines, first line is Italic, second line is Bold, third line is underline, fourth line is red in color and fifth line is blue in color. Along with above use at least 10 more commands to reflect in the paragraph.



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Roll No.

35414

**Diploma in Data Science
EXAMINATION, 2025**

(Second Semester)

PROGRAMMING WITH R

PGDS-23-24

Time : 3 Hours]

[Maximum Marks : 80

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. Define variable and write syntax of declaring it. Write various data types used in R program in a tabular form to give details like name of data type, memory requirements, lower and upper limit of data type.
2. Explain with example the steps of reading, writing, updating data from a data set than excel. List the limitations of R language in accessing data from statistical tools.

Unit II

3. Write a program using nested loop to print the following patter on screen :

```
*  
**  
***  
****  
*****
```

4. Differentiate between the purposes of using if else and switch statement. Write the syntax and give example of using switch case statement.

Unit III

5. Discuss the type of problems for which regression operation is to be performed. Differentiate between logistic and multiple regression.
6. What do you mean by step wise variable selection ?

Unit IV

7. Show the use of decision tree by giving at least three examples.