

(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2020 ONLY)

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20 UCS 622

REG.NO.

N.G.M.COLLEGE(AUTONOMOUS): POLLACHI
END-OF-SEMESTER EXAMINATIONS: MAY-2023

B.Sc.- COMPUTER SCIENCE
VI SEMESTER

MAXIMUM MARKS : 70
TIME : 3 HOURS

PART-III
R PROGRAMMING

SECTION-A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS.

(K1)

1. Each margin is considered to have a number of _____
 - a) Test
 - b) Text lines
 - c) Line segment
 - d) Margins
- 2.. Which function is used to combine the elements into a vector?
 - a) C()
 - b) D()
 - c) E()
 - d) F()
3. An R function is created by using the _____ keyword?
 - a). fun
 - b). function
 - c). declare
 - d). extends
4. The full form of CSV is
 - a) Comma Separated Values
 - b) Comma Separated Value
 - c) Comma Separated Variables
 - d) Comma Separate Values
5. Which of the following functions is typically used to add elements to a plot in the base graphics system?
 - a) lines()
 - b) hist()
 - c) plot()
 - d) boxplot()

SHORT ANSWERS

(K2)

6. What are scripts in R?.
7. What is the difference between array and factor?.
8. How to use string in R Programming?
9. Is median class and mode class always same?.
10. Can you make charts in R?

(CONTD....2)

SECTION – B

(5 X4 = 20 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS: (K3)

11. a) Write an R program to take input from the user (name and age) and display the values. Also print the version of R installation.
(OR)
b) Create a GUI for a function that adds or multiplies two numbers x and y.
12. a) Write an R program to create a vector which contains 10 random integer values between 50 and +50..
(OR)
b) Write an R program to find the factors of a given number..
13. a) A Commercial Bank has introduced an Incentive policy of giving Bonus to all its Deposit Holders.
The Policy is as follows:
(i) A Bonus of 2% of the Balance held on 31st is given to everyone of the irrespective balances.
(ii) A Bonus of 5% is given to the Female Account Holders, if Balance is more than Rs.5000/--
Write an R Programming using nested if .
(OR)
b) Calculate Sales Commission of sales representative:
(i) if Sales <=500 then no Commission
(ii) if Sales > 500 and Sales <= 5000 then Commission = 10% of Sales
(iii) if Sales >5000 then Commission = 500 + 8% of Sales –
Write a R Programming Using else if ladder .
14. a) Describe in brief different ways to read or import a text file into a string variable with example.
(OR)
b) Write an R Program to read a CSV from a URL.
15. a) Construct a simple example of add notch to Box of Boxplot and change Color or Boxplot.
(OR)
b) Write an R Program to display Histogram with added Parameters and return value.

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. Analyze the various types of Comments with example Program.
17. Summarize the most popular 5 Code editor for R programming Language with example.
18. Write an R program to create a Dataframes which contain details of 5 employees and display the details..
19. Point out in brief about various Loop Statements in R Programming with example code.
20. Determine in detail working with XML Files in R Programming.
21. Discuss in detail Scatter Plots using ggplot2 in R Programming with example.