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| **DIT UNIVERSITY DEHRADUN**   |  |  | | --- | --- | | **B.TECH (CSE)** | **(Regular/Back) MID TERM EXAM,ODD SEM 2023-24 (SEM V)** | | | | | | | | | | | | | |
| **Roll No.** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Subject Name: R Programming** | | | | | | | | | | | | |

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| **Time: 2 Hours** | **Total Marks: 50** |
| **Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the exam.**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**   |  |  |  | | --- | --- | --- | | Q.1) | Attempt all Parts : | | |  | (a) | What is R programming? Explain the basic feature of R. | |  | (b) | Which operator is used to check the elements available in the list or not? Write the complete code. | |  | (c) | Write a program to demonstrate the user defined functions in R. | |  | (d) | Write the difference between followings.   1. <- and <<- (ii) cat and paste | |  |  | **[4 x 2.5= 10]** | |  | | | | Q.2) | Attempt all Parts : | | |  | (a) | Write a program to demonstrate the nesting of if else. | |  | (b) | Write a program to demonstrate the use of break and next in R. | |  | (c) | Explain the different limitations of R. | |  | (d) | Describe any five arithmetic operators using an appropriate R program. | |  |  | **[4 x 2.5= 10]** | |  | | | | Q.3) | Attempt any Two Parts : | | |  | (a) | How can we use R as a calculator? Explain with examples. | |  | (b) | What is S Programming? Illustrate the basic difference between S and R. | |  | (c) | Illustrate the different types of data types available in R. | |  |  | **[2 x 5= 10]** | |  | | | | Q.4) | Attempt any Two Parts : | | |  | (a) | Illustrate the different types of loops available in R. Explain with example. | |  | (b) | Write a program in R to create and combine two matrices into single matrix. | |  | (c) | Illustrate the use of dim() and c() function to create an array in R. | |  |  | **[2 x 5= 10]** | |  | | | | Q.5) | Attempt any Two Parts : | | |  | (a) | How we can combine two lists into a single list? Write the complete code. | |  | (b) | Write the code in R to describe the Reading and Writing data into R. | |  | (c) | Write all the possible ways to create vector in R. | |  |  | **[2 x 5= 10]** | | -----END OF PAPER ---- | | | | |