# **Department of Computer Science & Engineering**

**QUESTION BANK FOR VII Semester (Term: Aug-Dec 2019)**

**Data Analytics Laboratory(CSL75)**

**I.A. Marks : 50 Exam Hours: 03**

**Credits: 0:0:1:0 Exam Marks: 50**

**Develop and Execute the following programs in R Language using R-studio**

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| --- | --- |
|  | Write R script for performing simple linear regression over faculty dataset to predict their publications based on their past performance in terms of number of publications and experience in years.   1. Using predefined functions. 2. Without using predefined functions |
|  | Write R script for performing multiple linear regression over faculty dataset to predict their publications based on their past performance in terms of number of publications and number of training programs attended.   1. Using predefined functions. 2. Without using predefined functions |
|  | Write R script for implementing KNN on Loan Approval Dataset to predict defaulters. |
|  | Write R script for performing simple Linear Regression over advertisement dataset to predict sales based on the past history of sales and budget spent for advertisement.   1. Using predefined functions. 2. Without using predefined functions |
|  | Write R script for performing Multi-linear regression over advertisement dataset to predict sales based on the past history of sales, media of advertisement and budget spent for advertisement.   * 1. Using inbuilt functions   2. Without using predefined functions |
|  | Write R script to perform logistic regression over Bank data set with qualification, credit card, bank balance, default details, using predefined functions. |
|  | Write R script to Demonstrate Linear Discriminate Analysis over Bank data set with qualification, credit card, bank balance, default details, using predefined functions. |
|  | Implement QDA to predict defaulters using Bank data set with qualification, credit card, bank balance, default details, using predefined functions. |
|  | Write an R script to apply bloom filter over the given set of user login data. |
|  | Write an R script to estimate the number of distinct elements by hashing the elements of the universal set to a bit-string of user logins that are suﬃciently long, using Flajolet-Martin algorithm. |
|  | Write R script for implementing KNN with students grade dataset in past and predict the grade of a new student. |
|  | Write R script for performing simple linear regression over students data set consists of their marks in three related subjects’ scores. Give a student mark in a subject to predict another subject mark. |
|  | Write R script for performing Multiple linear regression over students data set consists of their marks in three related subjects’ scores. Give a student marks in two subjects and predict the third subject mark. |
|  | Write an R script to apply bloom filter over the given set of URL clicked by a user. |

**Note:**

* **Student is required to solve one problem from the give question bank.**
* **The questions are allotted based on lots.**

**Marks Distribution:**

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| --- | --- | --- | --- | --- |
| **Write-Up** | **Execution** | **Viva/Project Demo** | **Change of Program** | **Total** |
| **10** | **20** | **20** | **-10 Marks** | **50 Marks** |