

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA INTEGRATED SEMESTER-VIII EXAMINATION – SUMMER 2023

Subject Code: 4480602

Date: 28/06/2023

Subject Name: Data Analytics with R

Time: 10:30 am to 01:00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is data analytics? Explain types of data analytics with example. **07**
(b) What is variable? How to assign variable and remove variable in R programming? **07**
- Q.2** (a) Explain five characteristics of effective data analytics. **07**
(b) What is data frame? Explain the functionality of data frame with example. **07**
- OR**
- (b) Explain all the data types in R with example. **07**
- Q.3** (a) What is regression? Explain linear and multiple regression with example. **07**
(b) List the packages used to read a data such as Csv Files, XML File, Web data, JSON File, Excel File. Explain in brief. **07**
- OR**
- Q.3** (a) Explain Histogram with example. **07**
(b) How to read data from database (MS Access/ Oracle/MySQL). Explain in detail. **07**
- Q.4** (a) Explain following function with example: (i) List() (ii) ts() (iii) setwd() **07**
(b) What is linear regression? Explain with example **07**
- OR**
- Q.4** (a) Describe decision tree with example. (Output is not required) **07**
(b) Explain various control structure in R with sample example code. **07**
- Q.5** (a) Explain active learning process in detail. **07**
(b) Discuss Reinforcement Learning in detail. **07**
- OR**
- Q.5** (a) What is Graph? Explain graphical elements in detail. **07**
(b) Discuss design of experiment explain in detail? **07**
