

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA INTEGRATED - SEMESTER-VIII • EXAMINATION – WINTER 2020****Subject Code:4480602****Date:02-01-2021****Subject Name:Data Analytics with R****Time:02:00 PM to 04:00 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a) Do as directed: 07**
- 1) In 1991, R was developed at the Department of Statistics at the University of _____.
 - 2) Fullform : TS
 - 3) OLTP aggregate and stores historical data.(True/false)
 - 4) In normal distribution, _____ function is used to find CDF.
(A) dnorm (B) pnorm (C) qnorm (D) rnorm
 - 5) Which package is used for Decision Tree:
(A) rpackage (B) rsession (C) rpart (D) dpart
 - 6) This function closes the specified plot :
(A) lm() (B) glm() (C) pairs() (D) dev.off()
 - 7) Which function is used to take population from dataset:
(A) sample() (B) population () (C) random() (D) test()
- (b) Write a note on classification of data in detail. 07**
- Q.2 (a) What is data analytics and write any two applications of data analytics? 07**
- (b) Explain decision tree with example. 07**
- Q.3 (a) What is data frame? Explain the functionality of data frame with example. 07**
- (b) Explain dnorm(), pnorm(), qnorm() and rnorm() with suitable example. 07**
- Q.4 (a) Difference between Prescriptive analytics and Predictive analytics. 07**
- (b) What is vector? How to create a vector ? Explain logical and character vector with example. 07**
- Q.5 (a) Explain linear regression in detail? 07**
- (b) Write a note on Descriptive Analytics in detail. 07**
- Q.6 (a) Explain time series analysis with suitable example. 07**
- (b) How to read data from excel? Explain in detail 07**
- Q.7 (a) Write R script to draw bar graph using following data: 07**
Sale <- c(7,12,28,3,41)
months <- c("Mar","Apr","May","Jun","Jul")
- (b) Explain reinforcement in detail. 07**
- Q.8 (a) Write R script to read a data from JSON file with suitable example. 07**
- (b) Explain Histograms and box plot using suitable example. 07**
