



B.Tech VI Semester Regular/Supplementary Examinations, June 2022

**INTRODUCTION TO ANALYTICS
(Computer Science and Engineering)**

Maximum Marks: 70

Date:17.06.2022 Duration: 3 hours

- Note: 1.This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10x2M=20 Marks)

- 1 What are the key features of R-Programming used for analytics?
- 2 How repeat loop is working? Show an example
- 3 State central limit theorem
- 4 Explain professionalism from your perspective
- 5 Compare relational and non-relational databases
- 6 List down the steps to connect R language with NoSQL
- 7 What are the types of ANOVA tests?
- 8 Relate correlation and regression
- 9 Examine the ways to analyze a problem
- 10 Define requirement gathering

Part-B

Answer All the following questions. (10MX 5=50Marks)

- 11 A. Find Sum, Mean and Product of Vector in R Programming. [5]
B. How to handle dataset in R programming. [5]
OR
- 12 A. Extract every Nth element of a vector in R. [5]
B. Write a R program to create an array of two 3x3 matrices each with 3 rows and 3 columns from two given two vectors. [5]
- 13 How to achieve effective work through individual ability, team spirit and communication skills? Explain with an example. [10]
OR
- 14 Discuss about all descriptive statistics summarizing data with R. [10]
- 15 Demonstrate the pros and cons of using SQL and NoSQL with R programming. [10]
OR
- 16 A. Explain how to use Excel as backend for R programming? [5]
B. Explain how to connect R to NoSQL. [5]

- 17 A. Examine the importance of forecasting in data analytics. [5]
B. Write about qualitative forecasting methods. [5]

OR

- 18 A. State the purpose of regression analysis. [5]
B. Explain multiple regression with an example. [5]
- 19 A. What is engineering approach and financial approach. [5]
B. How to solve a problem technically using engineering techniques? [5]

OR

- 20 Explain any software problem from requirement gathering to validation. [10]