R20 Regulation *Subject code:3E7FA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Supplementary Examinations, May 2026

INTRODUCTION TO DATA ANALYTICS

(IT)

Maximum Marks: 70 Date: 15.05.2026 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.
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)		Marks	CO	BTL
1	Define various data types.	2M	1	L1
2	What is Data Frame?	2M	1	L1
3	What is Probability?	2M	2	L1
4	Define effective communication skills.	2M	2	L1
5	What is R connector?	2M	3	L1
6	Write the differences of NOSQL and SQL.	2M	3	L1
7	Define Multiple Linear Regression?	2M	4	L1
8	How correlation is used for data analysis?	2M	4	L1
9	What is meant my Manufacturing?	2M	5	L1
10	Name different business problems related to various businesses.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) What are the looping structures available in R? b) State about time management and work.	5M 5M	1	L2
	OR			
12	Explain briefly about the concept of Reading Datasets, types of Datasets with their syntax and example.	10M	1	L2
13	What is summarization of data? Explain different types of summarizations in R.	10M	2	L2
	OR			
14	Explain about Central Limit Theorem in detail with example in R.	10M	2	L2
15	Explain the term NO SQL. Write the differences of NO SQL and SQL.	10M	3	L2
	OR			
16	How data base connector is used to R-integrity?	10M	3	L2

17	Explain about Multiple Linear Regression with a suitable example.	10M	4	L2
	OR			
18	a) Justify the importance of correlation for prediction. b) Explain OLS regression.	5M 5M	4	L2
19	Explain the concept of Understanding systems and Engineering Design.	10M	5	L2
	OR			
20	Write an optimality function for a close loop system.	10M	5	L2