R20 Regulation *Subject code: 3E6HA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, April 2026

ADVANCED DATABASES

(CSE(DS))

Maximum Marks: 70 Date: 18.04.2026 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	List out types of Database System Architectures?	2M	1	L1
2	What are Page Shipping and Item Shipping?	2M	1	L1
3	What is Path Expression?	2M	2	L1
4	Define XML Schema Definition?	2M	2	L1
5	Define Information Retrieval?	2M	3	L1
6	Define TF and IDF.	2M	3	L1
7	What is Batch Update?	2M	4	L1
8	Define SQL Standards?	2M	4	L1
9	Define multilevel security?	2M	5	L1
10	What is Flow control?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Categorize the different types of Database System Architecture based on their structural design?	10M	1	L2
	OR			
12	Analyze and differentiate the four types of Parallel Join within Intraoperation Parallelism?	10M	1	L2
13	Analyze the concept of structured types within Object-Based Databases.	10M	2	L2
	OR			
14	Evaluate the querying and transformation procedures employed in XML Databases, considering their methodologies, tools, and implications for data retrieval and manipulation.	10M	2	L2
15	Evaluate the process of relevance ranking using terms in information retrieval.	10M	3	L2
	OR			
16	Analyze the concepts of synonyms, homonyms, and ontologies, providing examples to illustrate each.	10M	3	L2

17	a) Explain the TP-Monitor architecture, its components and interactions through a diagram. b) Analyze the concept of E-Commerce.	5M 5M	4	L2
	OR			
18	Analyze the concepts of spatial and temporal data, along with mobility time in databases.	10M	4	L2
19	Explain the Database Security Issues with suitable examples.	10M	5	L2
	OR			
20	Discuss the challenges associated with maintaining database security.	10M	5	L2