



R20 Regulation

Subject code:3E6EA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, July 2024

Advanced Databases (COMPUTER SCIENCE & ENGINEERING)

Maximum Marks: 70

Date:26.07.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory and 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)	CO	Bloom Tx
1	List out types of Database System Architectures?		CO1	L1
2	What are Page Shipping and Item Shipping?		CO1	L1
3	What is Path Expression?		CO2	L1
4	Define XML Schema Definition?		CO2	L1
5	What are Ontologies?		CO3	L1
6	What is Web Crawling?		CO3	L1
7	What is Transaction Processing?		CO4	L1
8	What is OLTP?		CO4	L1
9	What is granting and revoking?		CO5	L1
10	What is Statistical Database security?		CO5	L1

Part-B

Answer All the following questions.		(5X10M=50Marks)		
11	Categorize the different types of Database System Architecture based on their structural design? [10M]		CO1	L2
OR				
12	Explain briefly about the following with Examples? a) Parallel Sort b) Range Partitioning Sort c) Parallel External Sort Merge [10M]		CO1	L2
13	Evaluate Object-Based Databases, outlining both their benefits and drawbacks to provide a comprehensive understanding of their functionality? [10M]		CO2	L3
OR				
14	Analyze the role and significance of Document Type Definitions (DTDs) in XML Databases? [10M]		CO2	L3
15	Evaluate the process of relevance ranking using terms in information retrieval. [10M]		CO3	L2
OR				
16	Analyze the concepts of synonyms, homonyms, and ontologies, providing examples to illustrate each? [10M]		CO3	L2

17	Evaluate the concept of performance tuning in application development? [10M]	CO4	L2
	OR		
18	Analyze the various issues encountered in application development? [10M]	CO4	L3
19	Analyze the concepts of spatial and temporal data, along with mobility time in databases? [10M]	CO5	L3
	OR		
20	Analyze the Database Security Issues? [10M]	CO5	L2