



R20 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject code: 307AA

B.Tech VII Semester Regular Examinations, November 2023

DATABASE MANAGEMENT SYSTEMS

(Civil Engineering)

(Open Elective)

Maximum Marks: 70

Date:08.12.2023 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	Write about Data Definition Language?	L1
2	Define Entity and Relationship.	L1
3	Define SELECT operation in Relational algebra.	L1
4	Define Relationship and Relationship set.	L1
5	Write the properties of Decomposition?	L1
6	Define BCNF.	L1
7	Define a checkpoint.	L1
8	Write about View Serializability?	L1
9	Define Static Hashing.	L1
10	Define ACID Properties.	L1

Part-B

Answer All the following questions.

(5X10M=50Marks)

11	Explain about Database users and Administrators. [10M]	L2
	OR	
12	State and explain various features of E-R Models. [10M]	L1
13	Define Join and explain different types of joins. [10M]	L1
	OR	
14	Explain about Selection, Projection, Rename, division and Cartesian product operations in relational algebra with example? [10M]	L2
15	Define normalization and explain 1NF,2NF,3NF normal forms. [10M]	L1
	OR	
16	What is meant by closure of F? Where F is the set of functional dependencies. Explain computing F+ with suitable examples. [10M]	L1
17	Explain in detail about the two-phase locking protocol. [10M]	L2
	OR	
18	Explain in detail about Timestamp-Based Protocols. [10M]	L2

19	Explain about Tree Structured Indexing in detail. [10M]	L2
	OR	
20	Explain different operations performed on B+ trees. [10M]	L2