



R18 Regulation

Subject code:207AA

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

**B.Tech VII Semester Supplementary Examinations, November 2023**

## DATABASE MANAGEMENT SYSTEM

(Civil Engineering)

(Open Elective)

Maximum Marks: 70

Date:09.12.2023 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 the levels of data abstraction.	L1
2	What is DBMS? What are the advantages of DBMS?	L1
3	What is storage Manager?	L1
4	What is a data model? List the types of data model used	L1
5	What are stored and derived attributes?	L1
6	What is normalization.	L1
7	What is serializability?	L1
8	Write about relational model?	L1
9	What is linear hashing?	L1
10	How to insert an element in B+ tree?	L5
Part-B		
Answer All the following questions. (5X10M=50Marks)		
11	Draw an entity relationship for railway reservation system? (10M)	L1
OR		
12	a) What are the statements in SQL for destroying and altering tables? (5M)	L1
	b) What is a primary key and foreign key? (5M)	L1
13	Apply relational algebra and set theory that are supported in the relational model. (10M)	L3
OR		
14	Differentiate between delete, drop and truncate commands? Give examples for each of them? (10M)	L2
15	What is functional dependency? Explain computing closures of F with suitable examples. (10M)	L1
OR		
16	Write short notes on difference, union, rename, Cartesian product in relational algebra. (10M)	L1

17	Describe Timestamp based locking protocols. (10M)	L2
	OR	
18	Explain Buffer Management. (10M)	L2
19	Explain briefly how an element search insert and delete in B+ tree structure. (10M)	L2
	OR	
20	Explain static hashing and Extendible hashing. (10M)	L2