



Regulation R18

Subject code:207AA

**TKR COLLEGE OF ENGINEERING AND TECHNOLOGY**

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

**B.Tech VII Semester Supplementary Examinations, April 2024**

**Database Management Systems**

(CE)

**Maximum Marks: 70**

Date:30.04.2024 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)

- 1 What is storage Manager?
- 2 Define NULL values.
- 3 Explain two types of participation constraints?
- 4 What is meant by degree of relationship set?
- 5 What are the aggregate operators?
- 6 What is super key?
- 7 Define a Transaction? List the properties of transaction.
- 8 Discuss recoverable schedules?
- 9 What is linear hashing?
- 10 What is the order of B+ tree?

**Part-B**

Answer All the following questions.

(5X10M=50Marks)

- 11 Draw an entity relationship for railway reservation system. [10]  
OR
- 12 Describe briefly about the architecture of DBMS . [10]
- 13 Apply relational algebra and set theory that are supported in the relational model. [10]  
OR
- 14 Explain integrity constraints over relations with examples. [10]
- 15 What is functional dependency? Explain computing closures of F with suitable examples. [10]  
OR
- 16 Explain different normal forms with suitable examples. [10]
- 17 Describe Timestamp based locking protocols. [10]  
OR
- 18 Explain in detail Storage structure. [10]
- 19 Write in detail about index data structures? [10]  
OR
- 20 Write main differences between ISAM and B+ tree indexes? [10]