

Code No: 134AP**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B.Tech II Year II Semester Examinations, July/August - 2021****DATABASE MANAGEMENT SYSTEMS****(Common to CSE, IT)****Time: 3 Hours****Max. Marks: 75****Answer any Five Questions
All Questions Carry Equal Marks**

1. What is E-R Model? Draw an E-R Diagram for any Banking system. [15]
- 2.a) What is Trigger? How to implement Triggers in SQL?
b) What is the difference between tuple relation calculus and domain relation calculus? [7+8]
3. What is normalization? What are the conditions required for a relation to be in 3NF and BCNF. What is the difference between 3NF and BCNF explain with example. [15]
4. Describe the steps in crash recovery ARIES algorithm. [15]
- 5.a) What is indexing? Explain B+ index with example.
b) Discuss the relationship between Extendible and Linear Hashing. [7+8]
- 6.a) Explain the following:
i) Database Users ii) Database Administrator.
b) Distinguish between super key, Candidate key, Primary Key for a relation with examples. [8+7]
7. Define the terms primary key foreign key, and check constraints. How are these expressed in SQL? [15]
- 8.a) What are the applications of DBMS?
b) List all DDL and DML commands with suitable examples. [7+8]

---ooOoo---