

Code: EE7T5C

**IV B.Tech - I Semester – Regular/Supplementary Examinations
October - 2018**

**DATABASE MANAGEMENT SYSTEMS
(ELECTRICAL & ELECTRONICS ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1.

- a) What are different types of Data Models?
- b) List four significant difference between file processing and DBMS.
- c) What do you mean by weak entity set?
- d) Write a note on functional dependency.
- e) What do you mean by transaction?
- f) What is relational database schema?
- g) Define Primary key and foreign key.
- h) List down SQL facilities for concurrency.
- i) Define lock.
- j) What is normalization?
- k) What is Timestamp?

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Discuss in detail the database system architecture with neat diagram. 8 M
- b) Discuss any four advantages of DBMS. 8 M
3. a) What is Relationship and explain about Relationship sets? 8 M
- b) What is an ER diagram and discuss several choices to be made when generating an ER diagram. 8 M
4. a) Introduce Nested Queries. Explain Correlated Nested Queries. 8 M
- b) Explain in detail Integrity Constraints over Relations. 8 M
5. Explain in detail 1NF, 2NF, 3NF and BCNF with examples. 16 M
6. a) Explain how to implement atomicity in transactions. 8 M
- b) Describe the concept of serializability by two-phase locking with example. 8 M