IV B.Tech - I Semester – Regular Examinations – October - 2017

DATABASE MANAGEMENT SYSTEMS (ELECTRICAL & ELECTRONICS ENGINEERING)

Duration: 3 hours

Max. Marks: 70

PART – A

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

 $11 \ge 22$

1.

- a) What is DBMS?
- b) Explain about Data Independence.
- c) List the conditions that establish relationship between weak entity type and strong Entity type.
- d) Show an example for Roles.
- e) What is the difference between table and view?
- f) What is SQL and what does it do?
- g) What are the advantages of using SQL?
- h) What is Normal form in DBMS?
- i) What is No partial dependency?
- j) How Transaction support in SQL?
- k) Why do we need concurrency control?

PART - B

Answer any *THREE* questions. All questions carry equal marks. $3 \ge 16 = 48 \text{ M}$

- 2. a) Discuss about Database Languages and Interfaces. 8 M
 - b) Explain Centralized and Client-Server Architecture for DBMS.
 8 M
- 3. a) Discuss about Relationship types of Degree higher than two. 8 M
 - b) Design ER Conceptual schema diagram for the library database. 8 M
- 4. a) Discuss about Relation model concepts. 8 M
 - b) Illustrate various types of constraints on relations. 8 M
- 5. a) Explain Normal forms based in primary keys. 8 M
 - b) Discuss about Boyce-codd Normal form with an example.

8 M

- 6. a) What are the desirable properties of transactions? 6 M
 - b) Discuss about Two-Phase locking techniques for concurrency control. 10 M

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