Code: EC6T6FE-G, EE6T6FE-G

III B.Tech-II Semester–Regular/Supplementary Examinations–March 2018

DATABASE MANAGEMENT SYSTEMS
(Common for ECE & EEE)

Duration: 3 hours   Max. Marks: 70

PART – A

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

$$11x\ 2 = 22\ M$$

1. a) List any two characteristics of DBMS.

   b) What are the different database languages?

   c) Define relational database schema.

   d) What is nested query? Give example

   e) Define Strong Entity and Weak Entity in ER model.

   f) What is Relationship and Relationship set in DBMS?

   g) When the functional dependency is called transitive
      dependency?

   h) Define Second Normal Form.

   i) List the 4 properties of Transaction.

   j) List and define the purpose of any two TCL commands in
      SQL.

   k) What is concurrency control?

PART – B

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

$$3 \times 16 = 48 \text{ M}$$

2. a) What is DBMS? Draw and explain the architecture of DBMS.   10 M

   b) What is data independence? List and define the two types of Data independencies.   6 M

3. a) Discuss different types of constraints in DBMS.   8 M

   b) Explain the structure of basic SQL query with example.
   8 M

4. a) Explain conceptual data models with neat diagram.
   10 M

   b) What are the design issues of ER Model?   6 M

5. a) Define Normalization. List the three anomalies in database.
   8 M

   b) Explain BCNF with example   8 M

6. Explain Concurrency control in DBMS with examples and protocols.   16 M