Code: 9A05401

R09

B.Tech II Year II Semester (R09) Supplementary Examinations May/June 2016

DATABASE MANAGEMENT SYSTEMS

(Common to CSS, IT & CSE)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

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1 (a) Explain different types of relationships using crow's foot notation.
(b) Draw and explain the data base architecture.

2 (a) What are the requirements necessary to implement M:N recursive relationship? Explain with example.
(b) What are the two cases useful in composite primary key? Explain.

3 (a) What are the special relational set operations that are performed on database?
(b) How the 1: M relationship is implemented in a database composed of 2 tables? Give examples.

4 (a) What are the DML commands? Explain each with syntax.
(b) Explain how the computed columns and column aliases work in select queries.

5 (a) Summarize normal forms based on primary keys and the corresponding normalization processes.
(b) A set of FD's for the relation R {A, B, C, D, E, F} is AB→C, C→A, BC→D, ACD→B, BE→C, EC→FA, FC→BD, and D→E. Find a minimum cover for this set of FD's?

6 (a) Explain about how concurrency can be controlled using time stamp methods.
(b) What are wait/die and wound/wait schemas? Explain.

7 (a) What is immediate database modification and deferred database modifications? Explain.
(b) Explain about the concept recovery with concurrency transaction.

8 (a) What are the causes of bucket overflow in a hash file organization?
(b) What can be done to reduce the occurrence of bucket overflow?

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