Code: 9A05401

R09

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017
DATABASE MANAGEMENT SYSTEMS
(Electronics & Computer Engineering)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 (a) Explain how to transform raw data into information.
   (b) Describe the extended relational data model (ERDM) with suitable examples.

2 (a) Explain about ternary relationship and key constraints for ternary relationship.
   (b) Illustrate primary key and super key with example.

3 (a) What is a join? What is the difference between left and right outer joins? Explain with examples.
   (b) Explain how the rules of integrity are applied on relational database.

4 (a) Explain how to order a list in advanced select query and how to list the unique values in them.
   (b) What is a stored procedure? Explain with example.

5 (a) What is meant by the completeness and soundness of Armstrong's interference rules?
   (b) Consider a relation R {A, B, C, D, E} with the following dependencies.
        AB→C, CD→E, DE→B is AB a candidate key of this relation? If not, is ABD? Explain your answer.

6   Explain about deadlock and 2-phase locking to ensure serializability in concurrency control with locking
      methods.

7 (a) Discuss how the recovery can be done with concurrent transaction?
   (b) Explain clearly about the concept ARIES and its features?

8   Explain multi - key file organization in detail?

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