

II B. Tech II Semester (R09) Supplementary Examinations, November/ December 2011

DATABASE MANAGEMENT SYSTEMS

(Common to Computer Science & Systems Engineering, Information Technology & Computer Science & Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Let $R = \{A, B, C, D \text{ and } E\}$. FD's = $\{AB \rightarrow C, A \rightarrow D, D \rightarrow E, AC \rightarrow B\}$. List all candidate key, prime attribute and non-prime attribute.
(b) Discuss attribute semantics as an informal measure of goodness for a relation schema.
- 2 (a) Explain about the remote backup system.
(b) Explain about concept of the buffer management in details.
- 3 (a) How the concurrency can be controlled using optimistic method Explain?
(b) Explain about database recovery management.
- 4 (a) List and explain steps to develop an ER diagram for an university.
(b) What is an overlapping subtype? Give an example.
- 5 What is a relationship? What are the different types of relationships that are used in relational database? Explain with examples.
- 6 What is RAID? Discuss.
- 7 (a) Explain object oriented model and network model in degrees of data abstraction.
(b) What are the functionalities of data base administrator?
- 8 (a) What is an index? What are the operations that are performed on an index?
(b) Write about the conversion functions in advanced SQL.
