

II B.Tech I Semester(R05) Supplementary Examinations, May/June 2010**DATA BASE MANAGEMENT SYSTEMS**

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

Time: 3 hours**Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Explain the Transaction management in a database.
(b) Discuss the Query Processor of Database system structure. [8+8]
2. (a) What is a relation? Differentiate between relation schema and relation instance. Define the terms unity and degree of relation. What are domain constraints?
(b) What SQL construct enables the definition of a relation? What constructs allow modification of relation instances? [8+8]
3. (a) explain about decomposition?
(b) Suppose the schema R(A,B,C,D,E) is decomposed into (A,B,C) and (A,D,E) show that the decomposition is not a dependency preserving decomposition if the following set of FD hold ABC, CDE, BD, EA. [8+8]
4. Explain the FD and MVD with examples? [16]
5. (a) Define Transaction & Schedule with suitable Example. [8]
(b) With suitable example explain ACID properties. [8]
6. (a) Discuss the Undo & redo operations & recovery techniques that use each. [6]
(b) How the use of 2PL would prevent interference between the two transactions. [5]
(c) Explain 3 main properties of ARIES Algorithm [5]
7. Give an example of a database application in which the reserved-space method of representing variable-length records is preferable to the pointer method. Explain your answer. [16]
8. (a) Compare the Ordered Indexing with Hashing.
(b) Compare Linear Hashing with extendable Hashing. [8+8]
