

Code: 9F00301

MCA III Semester Supplementary Examinations, July 2013

DATABASE MANAGEMENT SYSTEMS

Time: 3 hours

Max Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) What are the different functions of DBA?
(b) Explain different types of data models.
- 2 (a) Draw the ER diagram for hospital enterprise.
(b) Explain the terms: (i) Specialization. (ii) Aggregation.
- 3 Explain four fundamental operations of relational algebra. Each one with an example.
- 4 (a) Explain about virtual tables.
(b) Explain the terms: (i) Inner join. (ii) Outer join.
- 5 Explain BCNF with an example. Write the differences between 3NF and BCNF.
- 6 (a) Discuss in detail about time stamp based protocol.
(b) Explain about multiple granularity.
- 7 Discuss about recovery with concurrent transactions.
- 8 (a) What is indexing? How this can be done by B+ tree? Explain.
(b) What is a B+ tree a better structure than a B-tree for implementation of an indexed sequential file? Explain this with an example.
