

B.Tech II Year II Semester (R09) Supplementary Examinations December/January 2015/2016

DATABASE MANAGEMENT SYSTEMS

(Electronics & Communication Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) What are the components in ER model? Explain.
(b) Explain how the ER model produce a more structured relational data base design environment.
- 2 (a) What is an entity? Explain about the types of entities with diagrams.
(b) Define primary key? When does a composite primary key is used?
- 3 (a) What is a data dictionary? Consider a DB which consists of course and class tables and create the data dictionary.
(b) Explain about referential integrity and its types.
- 4 (a) How to list and update rows in a table? Explain with syntax and examples.
(b) What is a join operator? Explain about cross join and natural join with syntax and examples.
- 5 (a) Prove that a relation which is in 4NF must be in BCNF.
(b) Define and explain 4NF with suitable example.
- 6 Briefly explain about transaction log, 2 phase locking method and deadlock in transaction recovery management.
- 7 (a) What is roll of operating system in buffer management? Explain.
(b) Describe in detail about buffer management in detail.
- 8 Write disadvantages of following terms:
 - (a) B-Tree index.
 - (b) Hashing.
 - (c) ISAM.
