

Roll No

MCA-202
MCA. II Semester

Examination, December 2016
Data Base Management System

Time : Three Hours

Maximum Marks : 70

- Note:* i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.
ii) All parts of each question are to be attempted at one place.
iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.
iv) Except numericals, Derivation, Design and Drawing etc.

Unit - I

1. a) What are data models?
b) Differentiate between logical data independence and physical data independence.
c) Explain generalization and specialization.
d) Explain overall system architecture of DBMS.

OR

Explain reduction of ER schema to tables by taking example.

Unit - II

2. a) What is relational database?
b) What are foreign keys? Explain by taking examples.
c) Explain primary key, candidate keys, Alternate keys.

- d) Write syntax of SQL DDL statement. Also explain indexes and views and how they are created
OR

Explain various types of join.

Unit - III

3. a) What is non loss decomposition?
b) Explain what are functional dependencies.
c) What is Normalization? What are Normal Forms?
d) Compare 3NF and BCNF. Give an example where a relation is in 3NF but not in BCNF.

OR

What is join dependency? Explain fifth normal form.

Unit - IV

4. a) What are integrity rules?
b) Explain various transaction states.
c) What are check points? Explain its use.
d) Explain distributed databases. What are its advantages?

OR

Explain dead locks in database by taking examples.

Unit - V

5. a) What are the advantages of Network Model over Hierarchical Model.
b) What is Data Warehousing?
c) Explain Object Oriented Databases.
d) Write a note on Data Mining.

OR

What is RAID storage? Explain.
