BBA 2nd Semester Examination
Jan. 2014
Subject – Data Base Management System
Subject Code – CAL-110

Time Allowed: 03 hours. Maximum Marks: 100

Before answering the question paper the candidate should ensure that they have been supplied the correct question paper. Complaints in this regard, if any, shall not be entertained after the examination.

Note: All questions carry equal marks. Ques. No. 1 is Compulsory and attempt two questions from each section.

1. Write a short note on
   (a) Data dictionary
   (b) E-R diagram
   (c) Functional and Multivalued and Transitive dependencies
   (d) Recovery

2. (a) Discuss the architecture of Database System. (10)
   (b) Differentiate between:
       (i) File System and Database System
       (ii) Physical and Logical data independence

3. Explain with examples of following data models:
   (a) Hierarchical data model
   (b) Network data model
   (c) Relational data model

4. What do you mean by RDBMS? Explain. What are the Codd’s 12 Rules for a RDBMS to be accepted as a full fledged RDBMS? (20)

5. Explain the concept of Normalization. Also explain 1st to 3rd normal forms and BCNF with suitable examples. (20)

6. (a) Explain SQL. What are the main features of SQL? Also write the SQL command syntax for Create, Insert and viewing all records using suitable examples. (10)
   (b) Write a note on Concurrency control in database. (10)

7. (a) Explain by giving suitable examples, the working of set operators i.e. Union, Intersect, and Except.
   (b) How are the aggregate operators deals with null values?
   (c) What is referential integrity constraint? Explain.
   (d) Differentiate between Normalization and Denormalization. (5*4=20)