Krishna Kanta Handiqui State Open University
MCA 4th Sem. Examination, 2014
Database Management System Paper - 13 (Theory)

Time : 2 Hrs. Full Marks : 50

1. Answer any five from the following questions 2×5 =10
(each within 50 words)
   (a) Explain the word 'database' with example.
   (b) Explain binary relationship used in DBMS.
   (c) Explain the concept of Entity with real world example.
   (d) What is primary key? Explain with example.
   (e) Explain Functional Dependencies with example.
   (f) What is the use of multi level security.
   (g) Define database audit.

2. Answer any two from the following questions 4×2 =8
(each within 100 words)
   (a) Explain the advantages of DBMS.
   (b) What are the different types of attributes? Explain.
   (c) Define referential and entity integrity.
   (d) What is Functional Dependancy? Explain 2NF with example.

3. Answer any two from the following questions 6×2 =12
(each within 250 words)
   (a) Describe ACID porperties of a transaction.
   (b) Explain the responsibilities of DBA.
   (c) Explain the steps required for designing a good database.

(d) What is join? Explain with examples.

4. Answer any two from the following questions (each within 400 words) $10 \times 2 = 20$

(a) Explain the three-tier architecture of DBMS.

(b) What is attribute? Explain different types of attributes used in ER model.

(c) What is the need of normalization? Discuss 3NF and BCNF with suitable example.

(d) What is transaction? Write some examples of transaction. Explain the concept of transaction with the help of commit and Rollback operations.