Roll No. ……

981

Printed Pages:

BCA / D-12

INTRODUCTION TO DATABASE SYSTEM

Paper-BCA-234

Time allowed: 3 hours Maximum marks: 80

Note: **First question is compulsory**. A candidate will be required to answer **five** questions in All, selecting **one** question from each unit in addition to compulsory question .All Questions carry equal marks.

1. Compulsory question

(a) What do you mean by privacy?
(b) What is the difference between Casual and naïve end-users?
(c) What do you mean by data abstraction?
(d) State any two objectives of three level architecture.
(e) Distinguish between stored and derived attributes
(f) Define weak entity type.
(g) Define meta data.
(h) What do you mean by physical data model?

Unit-I

2. (a) Define information what are the characteristics of information? Differentiate between Data and information
(b) Explain traditional file processing system by using example. What are its disadvantages?

3. (a) What do you mean by DBA? What are its responsibilities?
(b) Define DBMS. Explain the various functions of DBMS.

Unit-II

4. (a) Explain schema, instance of the schema and types of schema.
(b) What do you mean by data independence. Explain various type of data independence.

5. Explain centralized and client server architecture to DBMS. Also write advantages and Disadvantages of centralized and client server architecture.

Unit-III

6. What are the steps in designing ER Model? Design a ER Model for a college database With following assumption:

(a) A college contains many departments.
(b) Each department can offer any number of course
(c) Many teacher can work in department
(d) A teacher can work only in one department
(e) Each teacher can take any number of courses
(f) A course can be taken by only one teacher
(g) A student can enroll for any number of courses.
(h) Each course can have any number of students.

7. (a) Explain network data model and its operation.
(b) Distinguish between network and hierarchical data model

Unit-IV

8. Write short note on the following :

(a) Extension
(b) Intension
(c) Integrity rule 1
(d) Integrity rule 2

9. Explain various types of keys used in relational data model with examples.