Unit–IV

8. What are the problems of bad database design ? Write the procedure of normalizing database while discussing various normal forms.

9. (a) Write the syntax of the following SQL commands and give an example of each :

 (i) Alter

 (ii) Insert

 (iii) Delete

 (iv) Update

 (b) Write short notes on the following :

 (i) Recovery

 (ii) Concurrency

Total No. of Questions : **9**] [Total No. of Pages : **4**

97671

BCA 3rd Semester (New) (Full & Reappear) Examination, March–2021

INTRODUCTION TO DATABASE SYSTEM

Paper–BCA-203

*Time : **Three Hours**]* *[Maximum Marks : **80***

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note :– Attempt *five* questions in all. Question No. **1** is compulsory and attempt *four* more questions by selecting *one* question from each Unit. All questions carry equal marks.

1. Answer the following questions :

 (a) Define the term database.

 (b) What are disadvantages of DBMS ?

 (c) What are the advantages of client server architecture ?

(d) What do you mean by data independence ?

(e) Define entity integrity constraint.

(f) Explain NULL constraint.

(g) What is SQL ?

(h) What is View ?

Unit–I

2. (a) What do you mean by Data ? How is it different from information, explain by example.

   (b) What is File Processing System ? What are its disadvantages ?

3. (a) What is DBMS ? What are the main facilities that every DBMS should provide ? Explain.

   (b) Who is DBA ? What are its various jobs and responsibilities ? Also give the additional duties that may be assigned to DBA.

Unit–II

4. Explain three-view architecture of database system with mapping. How these different views of database are related to the concepts of logical and physical data independence ?

5. (a) Write short notes on the following :

   (i) Record-based data model

   (ii) Object-Oriented data model

   (b) What are the different ways of classifying a DBMS ? Explain in detail.

Unit–III

6. (a) Design an E-R diagram for library management system. Make your own assumptions about the system.

   (b) Differentiate between network model and relational model with their relative merits and demerits.

7. Explain the following terms :

   (i) Domain

   (ii) Attribute

   (iii) Entity

   (iv) Entity set

   (v) Primary key

   (vi) Candidate key

   (vii) Foreign key

   (viii) Alternate key