

**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

Roll No. : .....

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 advantages ?
- 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