

Roll No. ....

**97671**

**BCA 3rd Semester (New)  
Examination – November, 2019**

**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, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Explain the following :

16

- (a) Traditional file based systems
- (b) Conceptual modeling
- (c) Database relations
- (d) Concept of security

### UNIT – I

2. Define Database System. Explain its components. Also explain advantages and disadvantages of Database System. 16
3. Explain the following : 16
  - (i) Database Administrator
  - (ii) DBMS Languages

### UNIT – II

4. Define Database System Architecture. Explain in detail about three levels of architecture. 16
5. Define Data Models and explain the following : 16
  - (i) Physical Data Models
  - (ii) Object Based Data Models

### UNIT – III

6. Explain the following : 16
  - (i) Entity sets
  - (ii) Abstraction and Integration

7. Explain Hierarchical and Network Data Models in detail. 16

### UNIT – IV

8. Define Normalization. Explain different types of Normal forms in detail. 16
9. Explain the following : 16
  - (i) Query Processing
  - (ii) Views