

Roll No. ....

97671

BCA 3rd Semester  
Examination – December, 2022

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 from each Unit. Q. No. 1 is compulsory.

1. Write short notes on following : 16

- (i) Data
- (ii) Scheme
- (iii) Entity
- (iv) Query

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UNIT – I

2. Explain the following 16
- (i) Advantages and disadvantages of database system
  - (ii) Limitations of file based approach
3. Define database management system. Explain its functions and components in detail. 16

UNIT – II

4. Describe in detail the three levels of architecture of database system. 16
5. Explain the following :- 16
- (i) Client server architecture
  - (ii) Object based data models

UNIT – III

6. Describe the following : 16
- (i) Abstraction and integration
  - (ii) Entity set

7. Explain the following 16
- (i) Relations  $\supset$  M
  - (ii) Network Data model

**UNIT - IV**

8. Give a complete description about normalization. 16
9. Explain the following 16
- (i) Query optimization
  - (ii) Concurrency and recovery
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