

Roll No. ....

**SECTION – B**

**UNIT – I**

**57734**

**BBA (II) 4<sup>th</sup> Semester (N. S.) 2014-17**

**Examination – July, 2021**

**DBMS AND RDBMS**

**Paper : BBA-II-N-404**

**Time : Three hours ] [ Maximum Marks : 50**  
*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 :** Section A is compulsory. Attempt one question from each unit in section B. All questions carry equal marks.

**SECTION – A**

1. (a) What is inheritance ?
- (b) Summarize the Usage of Integrity constraints.
- (c) Define the following terms TUPLE in the context of Database.
- (d) What is the need for the development of relational databases ?
- (e) What is BCNF ?

2. Define database and DBMS. What are the advantages of using a database over file management system ?
3. State the informal guidelines for relational schema design. Illustrate how violations of these guidelines may be harmful.

**UNIT – II**

4. What is entity, entity type, entity sets and attribute ? What is Mapping Cardinalities ? Explain different cardinalities.
5. (a) Explain the notational conventions used in the ER Model.  
(b) Construct an ER Model for Student Administration system. Students who apply for a course are registered in the system. Short listed candidates are called for interview and their marks recorded. Selected candidates are admitted.

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### UNIT – III

6. Compare and contrast relational algebra and relational calculus with their relative uses, merits, demerits and operators.
7. Define the following with respect to a diagram. Explain the manner in which each is mapped to a table. Illustrate with an example.
  - (i) Relationship set
  - (ii) Aggregation

### UNIT – IV

8. State the informal guidelines for relational schema design.
9. Define functional dependency and state the Normal Form based on this.