

Roll No.

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Total No. of Pages : 02

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BCA (2014 to 2018) (Sem.-4)
DATABASE MANAGEMENT SYSTEMS

Subject Code : BSBC-404

M.Code : 10069

Date of Examination : 20-12-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and a student has to attempt any **FOUR** questions.

SECTION-A

1. Answer briefly :

- What are the objectives of DBMS?
- What are the security threats to database?
- Differentiate between strong and weak entity.
- Define database recovery.
- What are primary key, secondary key and candidate key?
- What is the difference between cardinality and degree of a relation?
- Discuss Join concept with the help of suitable example.
- What is the meaning of integrity and accuracy in Database?
- What is an ER diagram?
- What is the difference between authentication and authorization?

SECTION-B

2. How the network model is a superset of hierarchical model? Explain with a suitable example.
3. What is normalization? Discuss the first, second, third and BCNF normal form.
4. **Differentiate between the following :**
 - a) DDL and DML
 - b) Generalization and Aggregation
5. Discuss in detail the design of distributed database with the help of suitable example.
6. Compare network, hierarchical and relational model in detail.
7.
 - a) Explain the responsibilities of DBA.
 - b) Differentiate between Physical and Logical independencies.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.