

Roll No.

Total No. of Pages : 02

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B.Tech. (CSE/EEE/EE/ECE/ME) (Sem-7)
DATABASE MANAGEMENT SYSTEM

Subject Code : BTCS501/18

M.Code : 90493

Date of Examination : 04-05-2024

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 FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) What is Data Independence?
- b) What is Transitive Dependency?
- c) Differentiate between single value and multi-valued attributes.
- d) What do you mean by integrity of data? List any two integrity constraints.
- e) Define Atomicity in transaction management.
- f) Explain the terms "specialization" and "generalization" in database design.
- g) What do you mean by Distributed Database?
- h) Mention the kind of constraints we can specify to create command DDL.
- i) Define DAC model.
- j) Why database security is important?

SECTION-B

2. What are Integrity Constraints? Why they are important?
3. What is the purpose of normalization in DBMS?
4. Discuss the various Concurrency Control Techniques.
5. Discuss the candidate key, primary key, super key, composite key and alternate key.
6. Explain Distributed Databases with its advantages.

SECTION-C

7. Write a note on hashing.
8. What are Object-Oriented Databases? Write its advantages and disadvantages.
9. What do you mean by Normalization? What do you mean by Multi-valued and Join Dependency? Also, explain 4th and 5th Normal forms with the help of examples.

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.