

Roll No.

Total No. of Pages : 02

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B.Tech. (CSE (Data Science)) (Sem.-6)
DATABASE MANAGEMENT SYSTEM
Subject Code : BTCS-501-18
M.Code : 92318
Date of Examination : 09-01-2023

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) Data Independence
 - b) Weak Entity
 - c) Primary Key
 - d) DML
 - e) SQL
 - f) Constraints
 - g) Hashing
 - h) Atomicity
 - i) Recovery
 - j) Domain.

SECTION-B

2. Explain various components of DBMS with diagram.
3. Explain the process of Normalization and normal forms.
4. How OLAP is used to extract and view data in warehousing?
5. Discuss with example various data manipulation and aggregate functions.
6. Explain distributed databases and with its advantages.

SECTION-C

7. Explain various functions of relational algebra with examples.
8. What is Data Mining? Explain data mining techniques. Compare between data mining and data warehousing.
9. Write a note on ACID properties. Explain with example the concept of serializability.

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.