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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech (CSE) (Sem.-5)

DATABASE MANAGEMENT SYSTEMS

Subject Code : BTCS-501-18

M.Code : 78320

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION 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 has to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students has to attempt any **TWO** questions.

SECTION-A

Answer briefly :

- 1) What is Data Independence?
- 2) Define the term Entity.
- 3) Difference between relation calculus and relational algebra.
- 4) What is Transitive Dependency?
- 5) What is Indexing?
- 6) Explain briefly various kinds of privileges.
- 7) What is shadow paging?
- 8) What is a transaction?
- 9) Why database security is important?
- 10) What is Locking?

SECTION-B

- 11) What are integrity constraints? Why they are important?
- 12) What is the purpose of normalization in DBMS?
- 13) Discuss various concurrency control techniques.
- 14) Discuss the importance of Authentication.
- 15) Explain Distributed databases with its advantages.

SECTION-C

- 16) a) What is data model? Explain its types.
b) Explain various data models.
- 17) Write note on hashing.
- 18) What are Object-Oriented Databases? Write its advantages and disadvantages.

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.