

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech (IT) (Sem.-5)
DATABASE MANAGEMENT SYSTEMS
Subject Code : BTIT-502-18
M.Code : 78257

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 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

Answer briefly :

- 1) What is data independence? What are its types?
- 2) Write various data manipulation operations that can be performed data.
- 3) Differentiate between char and varchar2 data types in oracle.
- 4) What is Transitive Dependency?
- 5) What is difference between primary index and secondary index?
- 6) What is a checkpoint in DBMS?
- 7) What is a transaction?
- 8) Why security is required in DBMS?
- 9) What are Web databases?
- 10) What are advantages of OODBMS?

SECTION-B

- 11) What is ER Diagram? What are the symbols used in it? Design and Draw an ER diagram for a banking system.
- 12) What is the difference between relational algebra and relational calculus?
- 13) Discuss the Shadow Paging Recovery Technique. Under what circumstances does it not require a log?
- 14) How can you manage access control to different data in database?
- 15) Explain distributed database with its advantages.

SECTION-C

- 16) What is normalization? Why do we need to normalize our database? Explain various normal forms by taking proper example.
- 17) What is Hashing? How Hash Codes Work? Explain with Examples.
- 18) Discuss various concurrency control technique.

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.