Roll No. ⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚   **Total No. of Pages : 02**

Total No. of Questions : 18

B.Tech. (IT) (2012 to 2017)   (Sem.–5)
DATABASE MANAGEMENT SYSTEM
Subject Code : BTIT-503
M.Code : 70596

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 Physical and logical data Independence of DBMS?

2. What is SQL Dependency?

3. Compare hierarchical model with relational model?

4. Explain 2nd and 3rd normal forms?

5. What are report generators?

6. Give syntax of JDBC?

7. Write the use of XML?

8. What is XQuery?

9. What is the use of NoSQL database?

10. What is transaction management in SQL?

SECTION-B

11.   Write a short note on distributed processing and client server architecture.

12.   Define relational algebra. Explain the various operations of relational algebra.

13.   What do you mean by Distributed databases? What are the policies used in distributed databases?

14.   Give the introduction of relational query optimisation.

15.   Explain the various schemas that can be used for the construction of data warehouse.

SECTION-C

16.   What are logical data model and physical model? Discuss physical data Modeling Techniques?

17.   What are nested elements in XML? What are the benefits of XML? Explain.

18.   Discuss how Online Analytical Processing (OLAP) is used to organize large business databases?

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.