Roll No. ☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CSE) (2012 to 2017)   (Sem.–6)

RDBMS-II

Subject Code : BTCS-602

M.Code : 71108

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

Write briefly :

1. Explain data Independence.

2. What are the components of query processor?

3. Explain role of Time Stamping in concurrency.

4. What are the advantages and disadvantages of DDBMS?

5. Define Views; can be used for updating database.

6. Write basic data mining process.

7. What is Shadow paging?

8. What is PJ/NF (5th Normal Form)?

9. Explain concept of Big Data.

10. Discuss different types of DDBMS.

SECTION-B

11. What are five level schemas in distributed database system? Give advantages and disadvantages of distributed database systems.

12. Explain concepts of 1NF, 2NF and 3NF for relational databases with the help of an example.

13. What is a transaction? What are various states of a transaction? Explain each state with the help of example.

14. Write short notes :

   a) Multi valued Dependency.

   b) Concurrency control.

15. What is rollback operation and why it is required?

SECTION-C

16. a) Why 4NF is a normal form more desirable than BCNF? Why?

   b) What is data mart? Which schema is suitable for data mart?

17. a) Define Shadow Paging. What are the drawbacks of shadow-paging technique?

   b) What is data allocation in DDBMS? Explain.

18. What are the steps involved in query processing? Explain. How would you estimate the cost of the query?

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.