

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(CSE)(2011 Onwards) (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

- Q1 What are the four important properties of transaction that a DBMS must ensure to maintain database?
- Q2 Discuss the two phase locking protocol.
- Q3 Compare OLTP and OLAP systems.
- Q4 Distinguish between ORDBMS and OODBMS.
- Q5 What is data mart? How it differs from a data warehouse?
- Q6 What do you mean by database independence? Discuss its types.
- Q7 What is normalization? Discuss 1NF.
- Q8 What do you mean by big data? Write its main properties.
- Q9 Discuss types of database failure.
- Q10 What do you mean by query optimization? Discuss.

SECTION-B

- Q11 Compare DDL, DML and DCL. Give two examples of each.
- Q12 What is a timestamp? How does the system generate timestamps? Discuss the timestamp ordering protocol for concurrency control.
- Q13 What is Data Mining? Discuss different phases in the data mining process.
- Q14 Explain the architecture of a data warehouse with the help of a diagram.
- Q15 Explain the steps involved in query processing.

SECTION-C

- Q16 Explain various recovery techniques in detail.
- Q17 What is Normalization? Explain in detail different forms of normalization with suitable example.
- Q18 Explain the architecture of a distributed database system with the help of a diagram. Write advantages and disadvantages of Distributed databases in comparison to centralized database.

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.