Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   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.