

Roll No.

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B.Tech. (Electronics & Computer Engineering) (2011 Onwards)**(Sem.-5)****RDBMS****Subject Code : BTEL-501****M.Code : 70577****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. Answer briefly :**

- (i) Distinguish between DDL and DML.
- (ii) What is the use of Group By clause? Discuss with examples.
- (iii) How we can join multiple tables? Explain.
- (iv) Discuss the different types of cardinality ratios in an E-R diagram.
- (v) Discuss the ACID properties of transactions in databases.
- (vi) What are firewalls? Discuss their use.
- (vii) Differentiate between fixed length and variable length records.
- (viii) What is aggregation? Give example.
- (ix) Differentiate between logical and physical data independence.
- (x) What is a trigger? How it is used?

SECTION-B

- Q2. Explain advantages of databases over traditional file system.
- Q3. Discuss various Integrity constraints in SQL with suitable examples.
- Q4. Discuss with examples how the grant and revoke commands can be used for access control.
- Q5. What is an index? Compare clustered, sparse and dense indexes.
- Q6. Explain various rules to convert an ER model to tables.

SECTION-C

- Q7. Compare Relational, Hierarchical and Network data models with the help of suitable examples.
- Q8. What do you mean by normalization? Discuss. Explain various forms of normalization with suitable examples.
- Q9. What is concurrency control? How is it achieved in DBMS? Explain in detail.

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.