Database Management System (New)
(1100)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :
1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **any two** questions from each unit.
5. Assume suitable data if necessary.
6. Figures to the right indicate full marks.

UNIT - I

1. a) Explain the distinction between condition - defined and user - defined constraints. Which of these constraints can the system check automatically. **10**

   b) Explain the distinction between Hierarchical data model and Network data model. How Insert, delete, Update, operations are done in Hierarchical data Model. **10**

   c) Draw an ER diagram to show cricket team statistics. Assume suitable entities, attributes and relationships. **10**

UNIT - II

2. a) Consider the following relational database and solve the following queries using relational Algebra. **10**

   Supplier (Supplier - id, Supplier_name, Supplier_address)
   Parts (Part - id, Part_name, Color)
   Catalog (Supplier_id, part_id, cost)

   i) Find the name of suppliers who supply yellow parts.

   ii) Find the name of suppliers who supply both Blue and Green parts.

   iii) Find the name of suppliers who supply all parts.

b) Explain different types of Triggers. How to apply Triggers. 10

c) Explain Extended Relational Algebra operations with example. 10

UNIT - III

3. a) Consider the relational database in Q.2 (a) and Solve all above queries in Q. 2(a) in SQL. 10

b) Explain Join Membership with example. 10

c) Explain creation and execution process of stored procedure with example. What are its advantages. 10

UNIT - IV

4. a) Explain BCNF Decomposition algorithm with example. 10

b) Explain Multiversion concurrency control methods. 10

c) Explain concept of cascaded abort with example. 10

UNIT - V

5. a) Explain Inter object relationships in detail. 10

b) Explain class subclass relationship. What are its different types. 10

c) Explain Need and Main Goal of Temporal database in detail. 10

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