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0605N220

Candidate's Seat No :_____

BSc Sem.-4 Examination
CC 205
Computer Science
May 2022

Time : 2-00 Hours] **[Max. Marks : 50**

Instructions: All Question in Section-I Carry equal marks.
Attempt any Three Questions in Section-I.
Question I in Section-II is COMPULSORY.

SECTION-I

Q.I	A	What is Database? What are advantages of Database System?	7
	B	What is data independence? Differentiate between logical and physical data Independence?	7
Q.II	A	What is ER model? What is an Component of ER Diagram?	7
	B	Write Short note on following 1)DDL 2)DML	7
Q.III	A	Difference between Generalization and Specialization in DBMS.	7
	B	Differences Between Primary Key and Candidate Key.	7
Q.IV	A	What are the different types of relationships in DBMS?	7
	B	Difference between Hierarchical Data Model and Network Data Model.	7
Q.V	A	Explain various Integrity constraint with Example.	7
	B	What is Normalization? Explain the 1st and 2nd Normal forms with example?	7
Q.VI	A	What is Functional Dependency? Give suitable example.	7
	B	Explain ACID properties of Transaction.	7
Q.VII	A	What is checkpoint? What is the advantage of taking checkpoints of a database?	7
	B	What is Deadlock? What are the methods used for deadlock prevention in DBMS?	7
Q.VIII	A	What is concurrency control in DBMS?	7
	B	Difference Between SQL and PLSQL.	7

SECTION - II

Q-IX MCQ 8

1. Which of the following is the full form of RDBMS?
   a) Relational Data Management System
   b) Relational Database Management System
   c) Relative Database Management System
   d) Regional Data Management System

2. What is an RDBMS?
   a) Database that stores data elements that are not linked
   b) Database that accesses data elements that are not linked
   c) Database that stores and allows access to data elements that are linked
   d) None of the mentioned

PTO

N 220-2

Seat No____

GUJARAT UNIVERSITY

April- 2022

B.Sc. Computer Science Semester – IV

PAPER – COM-205 (Relational Database Management System)

3. Does RDBMS have ACID properties?
   a) Follows ACID properties
   b) Doesn't follow ACID properties
   c) Depends on the data stored in the database
   d) Can't say

4. What is a relation in RDBMS?
   a) Key
   b) Table
   c) Row
   d) Data Types

5. Which of the following systems use RDMS?
   a) Oracle
   b) Microsoft SQLServer
   c) IBM
   d) All of the mentioned

6. Which of the following constraints RDBS doesn't check before creating the tables?
   a) Not null
   b) Primary keys
   c) Data Structure
   d) Data integrity

7. Which of the following commands do we use to delete a relation (RDBMS) from a database?
   a) delete table RDBMS
   b) drop table RDBMS
   c) delete from RDBMS
   d) drop relation RDBMS

8. _____ deletes a data item from a database.
   a) Insert(RDBMS)
   b) Drop(RDBMS)
   c) Delete(RDBMS)
   d) None of the mentioned