Seat No. _____   Enrollment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA (Integrated)– SEMESTER – 2 EXAMINATION – WINTER - 2018

Subject Code: 2527107   **Date: 01/01/2019**
Subject Name: Database Management System
Time: 02:30 PM To 05:30 PM   **Total Marks: 70**
Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q1 (A) What do you mean by Database? What is the Importance of a Firm Database   [7]
          in an Organization?

    (B) Explain the Following: [7]

                    (I) Data (II) Information (III) Data Management

Q2 (A) How the Databases are Organized in the Organizations? State its types along [7]
          with suitable examples
    (B) Which are the Components of Database? Explain Any Five of your Choice   [7]

                                      OR

    (B) What is RDBMS? What is the Structure of Relational Data?   [7]

Q3 (A) How the Database Architecture affects Data Independence? Explain with   [7]
          Examples both the Concepts

    (B) Which are the Database Languages? How the Database Designs and Database   [7]
          Constraints does matters while adopting the Database in your organization?

                                      OR

Q3 (A) Define the Following: [7]
              1. Functional Dependencies
              2. Decomposition
              3. Normalization
              4. Public Key
              5. Private Key
              6. Denormalization
              7. Candidate Key
    (B) Give a Practical Example of 1NF   [7]

Q4 (A) Explain with Diagrams: [7]

              1) Conceptual Data Model

              2) Logical Data Model

              3) Physical Data Model

    (B) Write a Note on: Database Relationships. Also Explain all Models with Charts [7]
          and Diagrams of 5 Customers

OR

Q4 (A) What is SQL? What are Various Features of SQL?   [7]

    (B) Give a Practical Example of 2NF   [7]

Q5 (A) Explain the Following with Diagrams: [7]

        1) Hierarchical Model

        2) Relational Model

        3) Network Model

    (B) Draw an E – R Model as per following: [7]

    There are 500 Students in IIM Ahmedabad Pursuing various Courses like 100
    in Marketing, 150 in Human Resources and rest in Finance Streams

OR

Q5 (A) What are the Integrity Constraints and Pitfalls in RDBMS?   [7]

    (B) Draw an E – R Model as per following: [7]

    There are 1000 Employees in a Chocolate Manufacturing Co. 10% works in
    Marketing Department, 20% works in Finance, 25% works in Human
    Resources Department and the rest of them works in Production Department

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