Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA(INTEGRATED) - SEMESTER–II EXAMINATION – WINTER 2020

Subject Code:2527107   **Date:11/02/2021**
Subject Name:Database Management System
Time:02:00 PM to 4:00 PM   **Total Marks:47**
Instructions:
1. **Attempt any THREE questions from Q1 to Q6.**
2. **Q7 is compulsory.**
3. **Make suitable assumptions wherever necessary.**
4. **Figures to the right indicate full marks.**

Q.1	**(a)**	What do you mean by Database? What kind of Role is Played by the Database in an organization? Please state your views	**07**
	(b)	*"Data is processed into Valuable Information and Valuable Information is processed into Knowledge"*	**07**

- Justify the Statement

Q.2	**(a)**	Explain any Four Components of Database with Examples	**07**
	(b)	Write the note on: Data Architecture	**07**
	(b)	Write the note on: Data Independence	**07**
Q.3	**(a)**	What are the Integrity Constraints and Pitfalls in RDBMS?	**07**
	(b)	From the Given Data, Create 5 Different Queries and Sub Queries:	**07**

Roll No	First Name	Last Name	Subject
2001	Akshay	Sharma	Chemistry
2002	Adam	Gilchrist	Biology
2003	Brad	Pitt	Chemistry
2004	Clinthia	Kardashian	Physics
2005	Daniel	Mirza	Physics

Q.4	**(a)**	What is SQL? State Various Features of SQL?	**07**
	(b)	From the Following Data, Create 5 Different Queries and Sub Queries:	**07**

Id	First Name	Last Name	City	State	Phone
75231	Anita	Gediya	Hyderabad	Telangana	(040) 23232521
75232	Joseph	D' souza	Panji	Goa	(0832) 5641120
75233	Khushbu	Jethva	Bhavnagar	Gujarat	(0278) 3662541
75234	Mitali	Patel	Pune	Maharashtra	(020) 65451120
75235	Dev	Dixit	Indore	M.P.	(0731) 3225645

Q.5	**(a)**	What is RDBMS? What is the Structure of Relational Data?	**07**
	(b)	Explain with Diagrams (Any two):	**07**

1) Physical Data Model

2) Conceptual Data Model

3) Logical Data Model

Q.6 **(a)** Write a Note on: Database Relationships. Also Explain all Models with Charts and Diagrams of 3 Students **07**

(b) Write a Short Note on: Single Row Functions of Structured Query Language **07**

Q.7 **(a)** What is Normalization? Explain any 2 Forms of your choice with suitable example **05**

OR

Q.7 **(a)** Write a Brief Note on: Multiple Row Functions of Structured Query Language **05**