Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA - SEMESTER– III EXAMINATION – WINTER 2020

Subject Code:4539252   **Date:06/01/2021**
Subject Name:Specialization-ITM_Systems Analysis and Design (SAD)
Time:10:30 AM TO 12.30 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**	**Define following terms briefly:**	**06**
		(a) Data Mart	
		(b) RFP	
		(c) RDMBS	
	b	**Define following terms briefly:**	**06**
		(1) File Server	
		(2) BPP	
		(3) Project	
Q.2	**(a)**	Mention & explain various methods of Assessing Project Feasibility.	**06**
	(b)	Why do companies resort to "Outsourcing"? How can you decide among various off the- shelf software options? What criteria should you use?	**06**
Q.3	**(a)**	What do you mean by decision table & explain the steps in creating a decision table by taking any example.	**06**
	(b)	What do you mean by requirement determination? Discuss various "Contemporary" methods for determining system requirements.	**06**
Q.4	**(a)**	Write down short note on: Prototype	**06**
	(b)	What are the different approaches to installation? Explain the most expensive method and also discuss most risky method for the same.	**06**
Q.5	**(a)**	Describe five methods of interacting with a system and list down various hardware devices for interacting with an information system.	**06**
	(b)	Explain DFD & Context & level 0 diagrams with an example.	**06**
Q.6	**(a)**	Define E-R modeling. Discuss Candidate keys & Identifiers with examples.	**06**
	(b)	Write down short note on: Software testing	**06**
Q.7		**Discuss the given case study with answers of following questions.**	**11**

Alumni Database Design

The Dean - Mr. John Lobo of the "*Excel*" business school wishes to create a "family" consisting of its graduates and corporations that have been staunch supporters of the School of Management. Finding the existing database inadequate in terms of providing him with the information he needs to achieve his goal, he wishes to develop a new alumni database for the college. He wants the new database to capture all relevant information on alumni of the college and the corporate supporters of the college. To build a long-term relationship with alumni, he wishes to keep track of all alumni from each functional area (e.g., Acctg, Fin, Mkt, etc.) of the college, where they work (or have worked in the past), and any donations that they have made to the college. Similarly, for corporate supporters, the database must capture all relevant information on donations made by each corporation.

Upon further interviews with the Dean, he has indicated the following specific requirements for designing of database:

- A report that displays alumni information for a specified area for a particular year (e.g., 2018 graduates). The report should list, for the specified area and year of graduation, each alumnus's name, e-mail address, the degree earned (e.g., BBA, PGDBM, MBA, Ph.D., etc.), work phone number, and home phone number. Note that a similar report could be required for any area and any graduating year.
- For a specified city (e.g., Houston), a report listing all alumni who live in that city. The report will display the name of the city, and for each alumnus in that city, their name, home address, email address, work phone, and home phone.
- A report listing all corporate donors who have donated a total amount greater than $25,000. The report will be sorted in descending order of the total donated amount.
- A report that displays all donations made to a particular G/L (General Ledger) account. The ID of the donor, as well as the date and amount of the donation must be displayed.
- A report listing all alumni working for a particular company (e.g., NORTEL). This report must also display the date an individual joined the company, as well as, their job title and salary.
- A report that displays the employment history for a particular alumnus. The report must show, for each employer that alumnus has worked for, the employer name, the most recent job title the alumnus had with that employer company (e.g., Vice-President), the date the alumnus joined the company, and the date the alumnus left the company (if applicable).

Questions:

1. According to you what benefits business school will get after implementation of new improved version of "Alumni Database"?
2. What security factors you will consider while designing & implementing this kind of database?

OR

Questions: 11

1. If you were the administrator of college, what other features you want to add to "Alumni Database"?
2. "Maintaining Database is always better than maintaining manual excel sheet"- Are you agree with this or not? Justify your stand.

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