GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED - SEMESTER–III EXAMINATION WINTER-2019

Subject Code: 2638603   **Date: 30/11/2019**
Subject Name: Structured & Object Oriented Analysis & Design Methodology
Time: 10.30 am to 01.00 pm   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Write a short note on- (1) JAD (2) <<include>> in use case (3) Structured English (4) multiplicity (5) dependency (6) do activity (7) class and object	**07**
	(b)	Define the term SDLC. Explain the steps of SDLC with suitable diagram.	**07**
Q.2	**(a)**	Draw the use case diagram for online shopping website.	**07**
	(b)	Draw context level, 0-level Data Flow Diagram (DFD) for library management system.	**07**
		OR	
	(b)	A bank has the following policy on deposits On deposits of Rs. 5000 and above and for three years or above the interest rate is 12%.On the same deposits for a period less than three year it is 10 %. On Deposits below Rs 5000 the interest is 8%. regardless' of the period of the deposits. Make a limited entry decision table and draw the decision tree.	**07**
Q.3	**(a)**	Discuss the fact finding techniques with suitable example.	**07**
	(b)	Explain the factors to consider when choosing output technology.	**07**
		OR	
Q.3	**(a)**	Write a short note on (1) Data dictionary (2) Scrum	**07**
	(b)	Explain the points to be consider during dialog design.	**07**
Q.4	**(a)**	Discuss the building blocks of UML in brief.	**07**
	(b)	Draw class diagram for online flight reservation system with proper explanation of classes and relationships.	**07**
		OR	
Q.4	**(a)**	How could you model the generalization and structural relationships?	**07**
	(b)	Discuss the structural and behavioral diagram of UML.	**07**
Q.5	**(a)**	Explain the common mechanism of UML in detail.	**07**
	(b)	Define state chart diagram. Draw the state chart for ATM machine.	**07**
		OR	
Q.5	**(a)**	What do you understand by interaction? Explain types of interaction diagram with suitable example.	**07**
	(b)	Discuss the common construct used for drawing activity diagram.	**07**

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