GUJARAT TECHNOLOGICAL UNIVERSITY
MCA– SEMESTER III- EXAMINATION –WINTER-2023

Subject Code:639403   **Date: 04/12/2023**

Subject Name: Software Engineering

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.
   4. Use of simple calculators and non-programmable scientific calculators are permitted.

Q.1	**(a)**	What do you mean by Eliciting Requirements? What is its role in building analysis model?	**07**
	(b)	Explain the waterfall process model in detail. Why does a waterfall model fail at times?	**07**
Q.2	**(a)**	Explain architectural style and its various categories in detail.	**07**
	(b)	Explain various kinds of design patterns in detail.	**07**
		OR	
	(b)	Explain the three golden rules that form the basis of interface design.	**07**
Q.3	**(a)**	What is refactoring? Briefly describe four elements of the design model	**07**
	(b)	Define Archetype? Briefly describe different architectural styles.	**07**
		OR	
Q.3	**(a)**	Write a short note on coupling and cohesion.	**07**
	(b)	Describe sprints, planning, and retrospectives.	**07**
Q.4	**(a)**	Describe principles of Agile software.	**07**
	(b)	Describe scrum values revisited.	**07**
		OR	
Q.4	**(a)**	Explain the Rules of scrum.	**07**
	(b)	Draw Sequence diagram for online train ticket booking.	**07**
Q.5	**(a)**	Draw Activity diagram for library management system.	**07**
	(b)	Draw an appropriate diagram of hospital management system for state chart.	**07**
		OR	
Q.5	**(a)**	Draw use case diagram for bank ATM.	**07**
	(b)	Draw Sequence diagram for online flight ticket booking.	**07**

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