Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER–V • EXAMINATION – SUMMER • 2014

Subject Code: 650001 **Date: 23-05-2014**

Subject Name: Software Engineering

Time: 10:30 am - 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)**	What do you mean by "Software Engineering". Write a brief note on Prescriptive Process Models.	**06**
	(b)	Explain the following terms in brief : (i) Phases of Extreme Programming (XP) (ii) Scrum	**04**
	(c)	Distinguish between the following : (i) Cohesion and Coupling (ii) Architectural Style and Architectural Pattern	**04**
Q.2	**(a)**	What do you mean by Eliciting Requirements? What is its role in building analysis model? How quality of requirements can be helpful in model building ?	**07**
	(b)	State and explain the golden rules that form the basis of interface design.	**07**
		OR	
	(b)	Write and explain the guiding principles of Validation and Testing.	**07**
Q.3	**(a)**	Discuss Requirements Modeling for WebApps.	**07**
	(b)	Explain Data abstraction and procedure abstraction.	**07**
		OR	
Q.3	**(a)**	Discuss Functional independence and Information hiding	**07**
	(b)	Explain OO Design Concepts with suitable examples.	**07**
Q.4.	**(a)**	Write a short note on Formal Technical Review (FTR).	**07**
	(b)	Explain Equivalence Partitioning and Boundary Value Analysis of Black-Box Testing.	**07**
		OR	
Q.4.	**(a)**	Write a brief note on : Architectural Styles.	**07**
	(b)	Discuss following Principles : (i) Open-Closed Principle (OCP) (ii) Common Reuse Principle (CRP)	**07**
Q.5.	**(a)**	Discuss Test Strategies for Conventional Software.	**07**
	(b)	What is Basis Path Testing? Explain Flow Graph Notation and Independent Program Path.	**07**
		OR	
Q.5.	**(a)**	Explain Unit Testing, Integration Testing and Validation Testing in an OO Context.	**07**
	(b)	Discuss Metrics for Requirements Model and Metrics for Design Model.	**07**

****