Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI (NEW) EXAMINATION – SUMMER 2023

Subject Code:2160701 Date:04-07-2023

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. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	**(a)**	Define following terms. 1. Software 2. Process 3. Software Requirement Specification	**03**
	(b)	Write a short note on Extreme Programming.	**04**
	(c)	Discuss the importance of Process Model in development of Software System. Explain Prototype Process Model.	**07**
Q.2	**(a)**	Describe factors that should be considered when the structure of a software team is chosen.	**03**
	(b)	Explain RMMM	**04**
	(c)	Prepare SRS for GTU e-assessment software.	**07**
		OR	
	(c)	Explain W^5HH principle.	**07**
Q.3	**(a)**	Differentiate between Function Oriented Design and Object Oriented Design	**03**
	(b)	Define Architectural Design. Enlist different styles and patterns of architecture.	**04**
	(c)	Develop a complete use case for searching of books (on a specific topic) using an on-line bookstore.	**07**
		OR	
Q.3	**(a)**	Differentiate between alpha testing and beta testing.	**03**
	(b)	Enlist the steps for top-down integration.	**04**
	(c)	Discuss the importance of User Interface. Explain User Interface design rules.	**07**
Q.4	**(a)**	Enlists the elements of Software Quality Assurance.	**03**
	(b)	Differentiate between Coupling and Cohesion.	**04**
	(c)	List and explain different types of testing techniques in detail.	**07**
		OR	
Q.4	**(a)**	Explain Formal Technical Review.	**03**
	(b)	Enlists the core steps of the Six Sigma methodology.	**04**
	(c)	Explain Software Configuration Management (SCM) process in detail.	**07**
Q.5	**(a)**	Explain Version and Change Control Management.	**03**
	(b)	Explain 4 P's of effective Project Management in detail.	**04**
	(c)	Write short note on software Re-engineering.	**07**
		OR	
Q.5	**(a)**	Explain Software as a Service (SaaS).	**03**
	(b)	Define steps to find cyclomatic complexity using flow graph.	**04**
	(c)	Discuss Software Configuration Management in detail.	**07**

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