GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VI (NEW) EXAMINATION – SUMMER 2023

Subject Code:3161605   **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)**	What is Software Engineering? Justify Software is Engineered but not Manufactured	**03**
	(b)	What is Process? Discuss the process framework activities.	**04**
	(c)	Explain Spiral Process Model and states its advantages and disadvantages.	**07**
Q.2	**(a)**	Discuss the differences among Reactive and Proactive Risks.	**03**
	(b)	Explain the process model which is defined as the ability of a project team to respond rapidly to a change.	**04**
	(c)	Explain Project Scheduling Process. Also Explain Gantt Chart in detail.	**07**
		OR	
	(c)	Explain COCOMO model for cost estimation.	**07**
Q.3	**(a)**	List the characteristics of a good quality SRS.	**03**
	(b)	Draw Data Flow Diagram for Library Management System	**04**
	(c)	Enlist and Explain Requirement Engineering Tasks in detail.	**07**
		OR	
Q.3	**(a)**	Compare Coupling and Cohesion.	**03**
	(b)	Draw Use Case Diagram for ATM System.	**04**
	(c)	What is Risk Management? Explain RMMM plan	**07**
Q.4	**(a)**	Describe golden rules of User Interface Design.	**03**
	(b)	What is BVA? List out guidelines of BVA.	**04**
	(c)	What is Software testing? Compare: Black box testing and White Box testing	**07**
		OR	
Q.4	**(a)**	Give the difference between Validation and Verification.	**03**
	(b)	What is Cyclomatic Complexity? Define steps to find cyclomatic complexity using flow graph.	**04**
	(c)	Explain the importance of Software Quality Assurance. Also explain different CMM levels.	**07**
Q.5	**(a)**	Describe CASE building blocks.	**03**
	(b)	Write short note on Reverse Engineering.	**04**
	(c)	List and explain the challenges in DevOps Implementation.	**07**
		OR	
Q.5	**(a)**	Explain Version and Change Control Management.	**03**
	(b)	Explain Formal Technical Review.	**04**
	(c)	Explain Software Re-Engineering process model.	**07**

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