GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– VI (NEW) EXAMINATION – WINTER 2021

Subject Code:2160701   **Date:24/11/2021**
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.**

Q.1	**(a)**	Differentiate between alpha and beta testing.	**03**
	(b)	Compare and contrast Water fall, Incremental, RAD and Spiral process model.	**04**
	(c)	Which model is best for risk driven program? Explain in detail?	**07**
Q.2	**(a)**	Discuss Scrum and Sprint in detail.	**03**
	(b)	Draw a Use case diagram for university student registration system.	**04**
	(c)	What is Requirement Engineering? List the Functional and Non Functional requirement for Digital Gujarat web portal.	**07**
		OR	
	(c)	What is extreme programming? How do you use it for development of mission critical software application?	**07**
Q.3	**(a)**	List Quality Standards. Explain any one.	**03**
	(b)	Explain project scheduling and tracking.	**04**
	(c)	What is Cyclomatic complexity? Define Steps to find Cyclomatic complexity using flow graph.	**07**
		OR	
Q.3	**(a)**	Describe golden rules of User Interface Design.	**03**
	(b)	Explain the following term in brief 1) Re-Engineering 2) Reverse Engineering 3) BVA 4) SaaS	**04**
	(c)	What is User Interface? Explain the design rules for UI.	**07**
Q.4	**(a)**	Explain CASE tools and its use in Software Engineering.	**03**
	(b)	Define Risk Management and elaborate RMMM plan.	**04**
	(c)	What is the importance of SQA? Explain the SQA activities	**07**
		OR	
Q.4	**(a)**	Explain different CMM levels.	**03**
	(b)	Explain Software Project management and W5HH principle	**04**
	(c)	Write short notes on COCOMO model.	**07**
Q.5	**(a)**	The WebE process model.	**03**
	(b)	List out various coding standards and briefly explain any four.	**04**
	(c)	Write a short note on Component-Based Software Engineering.	**07**
		OR	
Q.5	**(a)**	Write a difference between Validation v/s Verification	**03**
	(b)	Explain Version and Change Control Management.	**04**
	(c)	Write a short note on Software Configuration Management.	**07**

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