GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–V (NEW) EXAMINATION – WINTER 2022

Subject Code:3150711   **Date:06-01-2023**
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)**	List the goals of software engineering?	**03**
	(b)	Distinguish between process and methods.	**04**
	(c)	Explain the Evolutionary and Incremental Model. What are the Advantages and Disadvantages?	**07**
Q.2	**(a)**	Define the followings: 1) Agile methods 2) Agile process	**03**
	(b)	What is Extreme Programming?	**04**
	(c)	Explain how breakdown structure is used in software engineering. Discuss how software project scheduling helps in timely release of a product.	**07**
		OR	
	(c)	Discuss the concept of risk assessment and risk control.	**07**
Q.3	**(a)**	What are functional requirements?	**03**
	(b)	What are the elements of Analysis model?	**04**
	(c)	State and explain the requirements engineering tasks in detail.	**07**
		OR	
Q.3	**(a)**	What are non-functional requirements?	**03**
	(b)	Define design process. List the principles of a software design.	**04**
	(c)	Explain the feasibility studies. What are the outcomes? Does it have either implicit or explicit effects on software requirement collection?	**07**
Q.4	**(a)**	How to measure quality and defect removal efficiency.	**03**
	(b)	Explain reverse engineering.	**04**
	(c)	What is coupling? Explain the various types of coupling?	**07**
		OR	
Q.4	**(a)**	What is the importance of SQA?	**03**
	(b)	Explain the version control and change control.	**04**
	(c)	What is cohesion? Explain the various types of cohesion?	**07**
Q.5	**(a)**	What are the levels at which testing done?	**03**
	(b)	Describe the different challenges with DevOps implementation.	**04**
	(c)	What do you mean by integration testing? Explain their outcomes.	**07**
		OR	
Q.5	**(a)**	Define basic path testing.	**03**
	(b)	What is DevOps? Explain the importance and benefits of the DevOps.	**04**

(c) What is white box testing? Why it is required? Discuss different techniques **07**
of it?

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