Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER- V EXAMINATION-SUMMER 2023

Subject Code: 3150711   **Date: 26/06/2023**
Subject Name: Software Engineering
Time: 02:30 PM TO 05:00 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)	Differentiate between classical waterfall model and iterative waterfall model.	03
	(b)	Difference between Product and Process in the context of software engineering.	04
	(c)	How does RAD model work? Discuss the pros and cons of RAD model.	07
Q.2	(a)	How does function requirements differ from non-functional requirements of the software?	03
	(b)	What are the different risk identification methods? Explain any one of them in brief.	04
	(c)	Enlist and explain phases of agile development methodology.	07

OR

	(c)	Explain different project size estimation techniques.	07
Q.3	(a)	How does the behavior testing method work?	03
	(b)	Differentiate between verification and validation.	04
	(c)	What do you understand by performance testing? What are the different types of performance testing?	07

OR

Q.3	(a)	How does the glass box testing method work?	03
	(b)	Differentiate between integration testing and system testing.	04
	(c)	Which are the important characteristics for having good software design?	07
Q.4	(a)	Why low coupling and high cohesion is one of the desired properties of software design?	03
	(b)	Why project scheduling is required? Discuss merits and demerits of any one project scheduling technique?	04
	(c)	Write short note on Software CMM levels	07

OR

Q.4	(a)	How does one design a good user interface for the software?	03
	(b)	What are the basic challenges in reuse of program?	04
	(c)	Write short note on SIX SIGMA.	07
Q.5	(a)	What are the benefits of software reengineering?	03
	(b)	What are the differences between Agile and DevOps?	04

		(c)	Discuss 7 C's of DevOps Lifecycle for Business Agility.	**07**

OR

Q.5	**(a)**	Explain domain analysis process in component Based Software Engineering?	**03**
	(b)	What are different challenges for adopting DevOps?	**04**
	(c)	What is web engineering? Explain any three web engineering methods.	**07**

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