GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VI (NEW) EXAMINATION – SUMMER 2024

Subject Code:3161605   **Date:15-05-2024**
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)**	Describe software engineering as a layered technology.	**03**
	(b)	Describe various umbrella activities in software development.	**04**
	(c)	Discuss spiral model with diagram and compare it with waterfall model.	**07**
Q.2	**(a)**	What are the characteristics of the software?	**03**
	(b)	Explain Gantt chart in detail.	**04**
	(c)	List different agile process models and describe any one model in detail.	**07**
		OR	
	(c)	What are the principles of agile model? Also explain its advantages and disadvantages.	**07**
Q.3	**(a)**	Describe software process metrics.	**03**
	(b)	Explain extreme programming process.	**04**
	(c)	Write short note on COCOMO model.	**07**
		OR	
Q.3	**(a)**	Write characteristics of good SRS.	**03**
	(b)	Explain Earned value analysis in project scheduling	**04**
	(c)	What is risk management? Describe RMMM plan.	**07**
Q.4	**(a)**	Compare black box testing and white box testing.	**03**
	(b)	Write characteristics of good user interface.	**04**
	(c)	Explain details that should be incorporated in SRS.	**07**
		OR	
Q.4	**(a)**	Differentiate alpha testing and beta testing.	**03**
	(b)	Describe phases of requirement engineering process.	**04**
	(c)	List out different architectural styles in software design and describe any one style in detail.	**07**
Q.5	**(a)**	Write a short note on formal technical reviews.	**03**
	(b)	Explain importance of SQA (Software Quality Assurance).	**04**
	(c)	Describe different types of maintenance in software engineering.	**07**
		OR	
Q.5	**(a)**	Compare verification with validation.	**03**
	(b)	What are the advantages and disadvantages of component based development model?	**04**
	(c)	Describe phases of DevOps lifecycle.	**07**

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