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

Subject Code:3161605   **Date:13-12-2022**
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)**	Explain the process model which is used in situations where the user requirements are not well understood	**03**
	(b)	Draw the extreme programming process	**04**
	(c)	Explain Software Engineering as a Layered Technology	**07**
Q.2	**(a)**	Define Generalization. Explain with example	**03**
	(b)	Define feasibility study. Enlist and explain the contents to be included in the feasibility study report.	**04**
	(c)	Explain Project Scheduling Process. Also Explain Gantt Chart in detail	**07**
		OR	
	(c)	Describe CASE building block.	**07**
Q.3	**(a)**	Explain the different phases of Waterfall model.	**03**
	(b)	Explain steps involved during the prototyping	**04**
	(c)	Explain Functional Requirement and Non-Functional Requirement with example.	**07**
		OR	
Q.3	**(a)**	Distinguish between verification and validation	**03**
	(b)	Differentiate Software Engineering and Reverse Engineering.	**04**
	(c)	Write a short note on formal technical review	**07**
Q.4	**(a)**	Explain 4 P's of effective Project Management in detail.	**03**
	(b)	What is the importance of User Interface? Explain User Interface design rules	**04**
	(c)	Explain Black box testing and White box testing. Discuss all the testing strategies that are available.	**07**
		OR	
Q.4	**(a)**	Explain Version and Change Control Management.	**03**
	(b)	Explain Agile model	**04**
	(c)	List and explain different types of testing done during testing phase.	**07**
Q.5	**(a)**	Draw E-R Diagram for Online shopping System	**03**
	(b)	What is architectural design? Enlist different style and patterns of architecture.	**04**
	(c)	Explain concept of Test Case	**07**
		OR	
Q.5	**(a)**	What is Cyclomatic Complexity?	**03**
	(b)	Briefly Explain: Requirement Elicitation	**04**
	(c)	Explain Risk Management. Explain RMMM plan	**07**

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