Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–VI (NEW) EXAMINATION – WINTER 2020

Subject Code:2160701   **Date:20/01/2021**
Subject Name:Software Engineering
Time:02:00 PM TO 04:00 PM   **Total Marks: 56**
Instructions:
1. **Attempt any FOUR questions out of EIGHT questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	What is feasibility study? What are the contents we should contain in the feasibility report?	**03**
	(b)	Compare evolutionary model and iterative model.	**04**
	(c)	If you have to develop a word processing software product, what process model will you choose? Justify your answer and examine.	**07**
Q.2	**(a)**	Define agile process .Give any two agile principles.	**03**
	(b)	Explain Extreme Programming (XP) in detail.	**04**
	(c)	Explain software management activates.	**07**
Q.3	**(a)**	What are the characteristics of a good software design?	**03**
	(b)	What do you mean by modularity in software development? Why is it needed? What is its strength?	**04**
	(c)	Software is to be developed for hotel management system in which information is provided for all type of activities conducted in hotel. The major users of the system are hotel staff, people who stay in the hotel and people who visit the restaurant. Information for the billing system, hotel menu information, hotel room information is provided by software. **Prepare different scenarios and draw the Use Case Diagram for each scenario**	**07**
Q.4	**(a)**	Describe different types of cohesion.	**03**
	(b)	Explain the golden rules for software interface design.	**04**
	(c)	Explain Functional Requirement and Non-Functional Requirement with example of Shopping Mall Management System.	**07**
Q.5	**(a)**	Distinguish between verification and validation.	**03**
	(b)	Explain boundary value analysis with suitable example.	**04**
	(c)	Explain the maintenance activities and maintenance problems. How the cost of maintenance is estimated?	**07**
Q.6	**(a)**	Distinguish between alpha and beta testing?	**03**
	(b)	What do you mean by integration testing? Explain their outcomes.	**04**
	(c)	Write a short note on formal technical review.	**07**

Q.7	(a)	Explain SaaS architecture.	03
	(b)	Explain component based software engineering.	04
	(c)	What is the importance of SQA? Explain the SQA activities.	07
Q.8	(a)	Explain SCM process.	03
	(b)	Explain web based software engineering.	04
	(c)	How the CASE tools are classified. Explain about software cost estimation.	07

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