

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI EXAMINATION – SUMMER 2025

Subject Code:2160701

Date:20-05-2025

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) Compare prototype and RAD model.	03
	(b) Explain Agile Development in detail.	04
	(c) Explain Waterfall Model with suitable diagram.	07
Q.2	(a) Explain the merits and demerits of SCRUM.	03
	(b) Explain COCOMO model for project estimation.	04
	(c) Explain Project Scheduling Process. Also Explain Gantt Chart in detail.	07
OR		
	(c) What is the importance of User Interface? Explain User Interface design rules.	07
Q.3	(a) Discuss the concept of Agility.	03
	(b) Compare Coupling and Cohesion. Explain different types of Coupling and its effects on software modules.	04
	(c) Draw the Data Flow Diagram for Hotel Management System	07
Q.3	(a) Enlist and explain different types of maintenance.	03
	(b) What is architectural design? Enlist different style and patterns of architecture.	04
	(c) Explain Software as a Service (SaaS).	07
Q.4	(a) Compare and contrast alpha and beta testing.	03
	(b) Write short note on Reengineering.	04
	(c) What are the different testing strategies? Explain any one with suitable example.	07
OR		
Q.4	(a) Explain White Box Testing.	03
	(b) Differentiate between Quality Assurance & Quality Control.	04
	(c) Explain Risk Management.	07
Q.5	(a) Explain Client/Server Software Engineering.	03
	(b) Write short notes on Reverse Engineering.	04
	(c) Explain RMMM plan in detail.	07
OR		
Q.5	(a) What is Cyclomatic Complexity? Define Steps to find Cyclomatic Complexity using flow graph.	03
	(b) Explain Software Project management and W5HH principle	04
	(c) Explain Web Engineering.	07
