

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- VI EXAMINATION – SUMMER 2026

Subject Code:3164202

Date:22-05-2026

Subject Name: Agile Software Development & Devops

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) What are different layers of Software Engineering? Draw and explain it in short.	03
(b) What is UX design in agile?	04
(c) Describe in detail: Extreme Programming.	07
Q.2 (a) Compare Traditional Model and Agile Model.	03
(b) Draw and explain different phases of Agile Process Model.	04
(c) Which are impacts of Agile Processes on Requirements Engineering.	07
OR	
(c) Enlist and explain Techniques for Eliciting Requirements.	07
Q.3 (a) What is the difference between a product backlog and sprint backlog?	03
(b) What are Agile values?	04
(c) Explain Adaptive Software Development.	07
OR	
Q.3 (a) Explain agile forecasting in detail.	03
(b) Explain Institutional Knowledge Evolution Cycle.	04
(c) Explain ways of Knowledge Sharing in Agile Software Development Organizations.	07
Q.4 (a) Write qualities or skills needed for Agile Tester.	03
(b) Explain Challenges of Migrating to Agile Methodologies.	04
(c) Explain Types of Testing in Agile in Detail.	07
OR	
Q.4 (a) What are the fundamental differences between DevOps & Agile Development?	03
(b) What are the tips for agile decision-making?	04
(c) What is Agile Metrics? Explain any 5 Metrics.	07
Q.5 (a) Describe the different challenges with DevOps implementation.	03
(b) Draw and explain Test Automation Pyramid.	04
(c) Explain 7-C's of DevOps Lifecycle.	07
OR	
Q.5 (a) What are Importance and Benefits of DevOps?	03
(b) Explain DevOps continuous Testing in detail?	04
(c) Explain DevOps Principles.	07
