

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2021****Subject Code:3171610****Date:15/12/2021****Subject Name:Agile Development and UI/UX design****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.

		<b>MARKS</b>
<b>Q.1</b>	(a) Define “Agile development”.	<b>03</b>
	(b) What is meant by “UX”? Explain the importance of “Usefulness” and “Emotional impact” in UX design.	<b>04</b>
	(c) Discuss the important Agile Principles that guide agile development.	<b>07</b>
<b>Q.2</b>	(a) Explain the following terms with respect to Extreme Programming: (i) user stories (ii) pair programming	<b>03</b>
	(b) Compare Agile Model with Waterfall Model.	<b>04</b>
	(c) With the help of a neat diagram, discuss the Funnel Model of Agile UX and discuss its main features.	<b>07</b>
<b>OR</b>		
	(c) Write a detailed note on Agile Testing methods.	<b>07</b>
<b>Q.3</b>	(a) What is “Refactoring”?	<b>03</b>
	(b) What is meant by “Scope” and “Rigor” of a project? Briefly discuss the factors that influence Rigor during agile project development.	<b>04</b>
	(c) Write a detailed note on “SRP: The Single-Responsibility Principle”.	<b>07</b>
<b>OR</b>		
<b>Q.3</b>	(a) Define a “sprint” in agile development.	<b>03</b>
	(b) What are the problems that develop in software systems over time? How does agile design overcome these problems?	<b>04</b>
	(c) Write a detailed note on “OCP: The Open-Closed Principle”.	<b>07</b>
<b>Q.4</b>	(a) What is “acceptance testing”?	<b>03</b>
	(b) Discuss the significance of Prototyping as a UX lifecycle activity. What is a “clickthrough prototype”?	<b>04</b>
	(c) Discuss and compare the Top-Down and Bottom-up approaches for design using suitable examples.	<b>07</b>
<b>OR</b>		
<b>Q.4</b>	(a) What is a physical mockup? How does it help in design?	<b>03</b>
	(b) Discuss the following concepts with respect to Generative design: (i) ideation (ii) critiquing	<b>04</b>
	(c) Explain why a UX Design team should have people with diverse skills and backgrounds. Briefly discuss a real-world example where such a team can have a positive impact on the design of a product.	<b>07</b>

- Q.5** (a) What are “quantitative” and “qualitative” UX evaluation data? **03**  
(b) How do Agile UX and Agile Software Engineering work together? **04**  
(c) What is Empirical UX evaluation? With the help of a suitable example discuss the setting of Goals and Metrics for Empirical UX Evaluation. **07**

**OR**

- Q.5** (a) What is a “benchmark” task? **03**  
(b) Compare “Formative Evaluation” versus “Summative Evaluation”. **04**  
(c) Discuss the following data collection methods for Analytic UX evaluation: **07**  
(i) Design walk-through (ii) Expert UX Inspection.

\*\*\*\*\*