LNCT UNIVERSITY, BHOPAL

CS-501/ AL-501
B.TECH (CSE/AIML) V SEMESTER EXAMINATION
AGILE METHODOLOGY

Maximum Marks: 70   **Time Allowed: 3Hours**

Note:- Attempt all questions internal choice are given.   **(SECTION –A)**

1. **Short Answer Type Question (Attempt Any Five)**   **[5x6=30]**

–1. Explain the values and principles of Agile software development. How do these values support effective project management compared to traditional methods?

2. Describe the Lean approach in Agile software development. What are the common types of waste identified in software projects, and how do Kaizen and Kanban help in waste management?

3. Discuss the roles in Agile lifecycle and their responsibilities. How do Agile roles differ from roles in traditional software development projects?

4. What is the Agile Manifesto? List and briefly explain the twelve practices of Extreme Programming (XP) and how they contribute to Agile development.

5. Explain how Scrum works and why it is needed in Agile projects. Describe the core Scrum practices and the values that Scrum promotes within teams.

6. What are User Stories and Backlog Management in Agile? How do they influence the requirements and planning process in Agile projects?

7. How does Agile address risk management and quality assurance differently than traditional approaches? Explain the role of Test-Driven Development (TDD) and User Acceptance Testing (UAT) in Agile testing.

(SECTION –B)

2. **Long Answer Type Question (Attempt Any Four)**   **[4x10=40]**

1.Explain the fundamental values and principles of Agile software development. How do these principles address common challenges faced by stakeholders?

2.Describe the Lean approach in Agile, focusing on waste management, Kaizen, and Kanban. How do these practices add value to both Agile processes and products?

3.Compare Agile project planning with traditional planning methods. What are the key differences in Agile plans at various lifecycle phases?

4.What is the Agile Manifesto? Discuss the twelve practices of Extreme Programming (XP) and their role in supporting Agile principles.

5.Discuss the importance of communication, planning, and estimation in Agile product management. How do these elements help in monitoring progress and motivating teams?

6.Describe how Agile manages business involvement and escalates issues during project execution. What metrics and measurements are used to ensure quality and control risk?