Fabtech Tecnical Campus
College of Engineering & Research
The Future Begins Here.

Approved by AICTE, New Delhi; DTE, (M.S.), Mumbai & Affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, Dist- Raigad & M.S.B.T.E., Mumbai.

DTE CODE- 6756 MSBTE Code-1615

Assignment No:-01

Department: AI&DS **Semester: IV** **Academic Year: 2025-26**

Classs:- T.Y **Div: NA** **Maximum Marks: 50**

Course: Agile Methodology	**Course faculty: Dr.S.B.Thigale**	
Assignment No: One	**Date: 09/02/2026**	**Date of Submission: 15/02/2026**

Question No.	Question	Marks	CO	Blooms Level
Q. 1.	Explain the difference between the Traditional Model and Agile Model.	05	01	L2
Q. 2.	Describe the Agile Manifesto and its core values.	05	01	L1
Q. 3.	What are the different Agile methodologies? Explain any two in detail.	05	01	L3
Q. 4.	Discuss Agile Project Management and its key features.	05	01	L2
Q. **5.**	How does Agile methodology enhance software development compared to traditional	05	01	L4
Q.6	Explain the role of Agile teams and their interactions.	05	01	L2
Q.7	What is Agile Testing? How does it differ from traditional testing?	05	01	L4
Q.8	Describe Agile Documentation and its importance in the development process.	05	01	L2

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DTE CODE- 6756 MSBTE Code-1615

Assignment No:-02

Department: AI&DS **Semester: IV** **Academic Year: 2025- 26**

Classs: - T.Y **Div: NA** **Maximum Marks: 50**

Course:Agile Methodology	**Course faculty: Dr.S.B.Thigale**	
Assignment No: Two	**Date: 20/02/2026**	**Date of Submission: 05/03/2026**

Question No.	Question	Marks	CO	Blooms Level
Q. 1.	Explain the concept of Lean Production and its benefits in Agile Development.	05	02	L1
Q. 2.	Describe the Scrum framework, including its roles, artifacts, and ceremonies.	05	02	L1
Q. 3.	Discuss Crystal methodology and its various family members based on team size.	05	02	L1
Q. 4.	Explain Feature-Driven Development (FDD) with its key steps.	05	02	L1
Q.5.	What is Adaptive Software Development (ASD)? Describe its three phases.	05	02	L1
Q.6	Explain the Extreme Programming (XP) methodology, its lifecycle, and key practices.	05	02	L1
Q.7	Discuss the importance of work products in Extreme Programming (XP).	05	02	L1
Q.8	Compare and contrast Scrum and Extreme Programming (XP).	05	02	L1
Q.9.	Describe the roles and responsibilities of different team members in Scrum.	05	02	L1
Q. 10.	Explain the significance of Agile methodologies in modern software development.	05	02	L1

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DTE CODE- 6756 MSBTE Code-1615

Assignment No:-03

Department: AI&DS **Semester: IV** **Academic Year: 2025- 26**

Classs: - T.Y **Div: NA** **Maximum Marks: 50**

Course:Agile Methodology	**Course faculty: Prof. P.D.Gujare**	
Assignment No: Three	**Date: 10/03/2026**	**Date of Submission: 25/03/2026**

Question No.	Question	Marks	CO	Blooms Level
Q. 1.	Explain the concept of Agile Information Systems and their key characteristics.	05	03	L2
Q. 2.	Discuss the role of Agile Decision Making in software development and business processes.	05	03	L2
Q. 3.	Describe the Institutional Knowledge Evolution Cycle with its key phases.	05	03	L1
Q. 4.	What are the challenges of leveraging Knowledge Management in Software Engineering?	05	03	L4
Q. 5.	Explain how software knowledge can be effectively managed in Agile teams.	05	03	L3
Q.6	Discuss the major challenges of migrating from traditional to Agile methodologies	05	03	L4
Q.7	How does Agile Knowledge Sharing improve software development? Provide Example.	05	03	L3
Q.8	What is the role of Story-Cards in Agile development? Explain their advantages.	05	03	L2
9	Describe the Story-Card Maturity Model (SMM) and its significance in Agile development.	05	03	L2
10	Compare and contrast Agile Information Systems with traditional information systems.	05	03	L4

Assignment No:-04

Department: AI&DS **Semester: IV** **Academic Year: 2025- 26**

Classs: - T.Y **Div: NA** **Maximum Marks: 50**

Course:Agile Methodology	**Course faculty: Dr.S.B.Thigale**	
Assignment No: Four	**Date: 1/04/2026**	**Date of Submission: 20/04/2026**

Question No.	Question	Marks	CO	Blooms Level
Q. 1.	Explain how Agile processes impact Requirements Engineering.	05	04	L2
Q. 2.	Describe the key practices of Agile RE and how they improve requirement handling.	05	04	L2
Q. 3.	How does Agile manage evolving and changing requirements effectively?	05	04	L3
Q. 4.	Discuss the role of the Product Owner in requirement elicitation.	05	04	L2
Q. **5.**	Why is abstraction necessary in Agile requirements?	05	04	L4
Q.6	What tools and techniques are used for Agile requirements management?	05	04	L1
Q.7	Explain the MoSCoW prioritization technique with examples.	05	04	L3
Q.8	Compare Agile requirements modeling with traditional modeling techniques.	05	04	L4
Q.9	Explain how Agile allows concurrent requirement generation and development.	05	04	L2
Q.10	What are the challenges of concurrent requirements generation in Agile?	05	04	L4

Assignment No:-05

Department: AI&DS **Semester: IV** **Academic Year: 2025- 26**

Classs: - T.Y **Div: NA** **Maximum Marks: 50**

Course: Agile Methodology	**Course faculty: Dr.S.B.Thigale**	
Assignment No: Five	**Date: 22/04/2026**	**Date of Submission: 03/05/2026**

Question No.	Question	Marks	CO	Blooms Level
Q. 1.	Explain the principles and benefits of Agile Product Development.	05	05	L2
Q. 2.	How does velocity help in tracking Agile project progress?	05	05	L2
Q. 3.	Describe the five-step process of Feature-Driven Development.	05	05	L1
Q. 4.	How are production metrics used in Feature-Driven Development?	05	05	L3
Q.5.	How does Agile differ from traditional QA approaches?	05	05	L4
Q.6	Explain Test-Driven Development (TDD) and its importance in Agile.	05	05	L2
Q.7	Discuss the challenges and solutions of using Agile in Global Software Development.	05	05	L4
Q.8	How does Agile improve collaboration in distributed teams?	05	05	L3
Q.9	What are the advantages and challenges of implementing TDD?	05	05	L4
Q.10	What are Agile Metrics? Explain different types of Agile Metrics with examples.	05	05	L2