

Unit 1

Questions:

1. Define Software Engineering and its key characteristics.
2. List major applications of Software Engineering.
3. Explain the Software Development Life Cycle (SDLC) and its phases.
4. Briefly describe the following models:
 - a. Waterfall (Classical & Iterative)
 - b. Spiral
 - c. Prototyping
 - d. Rapid Application Development (RAD)
5. What are Software Processes? Provide an overview of process models.
6. Define Agile methodology and explain its principles.
7. Compare the following Agile methodologies:
 - a. Scrum
 - b. Extreme Programming (XP)
 - c. Lean
 - d. Kanban
8. Compare traditional and Agile models with real-world case studies.