UNIT-1

1. Define software engineering. Explain the Software Development Life Cycle (SDLC) steps in brief.
2. What are two kinds of software products?
3. Explain the classification of the software requirements?
4. Explain the structure of software requirement documents.
5. What are the components of software process? Explain.
6. Write a short note on the waterfall model.
7. Explain the Iterative Development Model.
8. Write a short note on the RAD model.
9. Write a short note on Spiral Model.
10. What are the principles of agile method?
11. Short note on Extreme Programming. (XP)

UNIT-2

1. State and explain the emergent systems properties with example.
2. Explain the legacy system with the help of diagram.
3. Explain the simple critical system with the help of diagram.
4. Explain Safety Critical Systems.
5. Explain the importance of feasibility study in requirements engineering process.
6. Explain about safety and security of software systems.
7. Explain the requirement validation process checks on the requirements in the requirement document.
8. Write short note on
   i) Context model
   ii) Object model.
9. Write a short note on Behavioral models.

UNIT-3

1. Write a short note on architectural design decisions.
2. Write a short note on modular decomposition styles.
3. What do you mean by user interface design? What is its need?
4. Explain user interface design process with the help of diagram.
5. What do you mean by Interface Evaluation? Explain.
6. What are the responsibilities of a project manager?
7. Write a short note on Project Scheduling.
8. Explain the risk management process.
9. What do you mean by process and product quality?
10. What is quality assurance? What are the quality standards types? Explain.
11. Write a short note on Software Measurement & Metrics.

UNIT-4

1. Define verification and validation. Explain software inspection in V & V process.
2. What is System Testing? Explain.
3. Write short note on Component Framework.
4. Explain the services as reusable components.
5. Write a short on function point (FP) and Line of Code (LOC) measures.
6. What is Function-Oriented Metrics? Explain.
7. Explain the software cost estimation technique.
8. Explain the Cost Constructive Model (COCOMO) with the formula for computing duration of project and manpower efforts for project.

UNIT-5

1. Describe the classification of process.
2. Write a short note on Process Measurement.
3. Explain the CMMI Process Improvement Framework.
4. Explain the services as reusable components.
5. Write a short note on software development with services.
6. Explain the Application framework.
7. Write a short note on COTS product reuse.
8. What are distributed systems issues? Explain briefly.
9. What are the architectural patterns for distributed systems? Explain Master-Slave architecture.
10. Write a short note on multi-tier client-server architectures.
11. Write a short note on Software as a service (SaaS).