### 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.
- THE NEXT LEVEL OF EDUCATION
- **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.

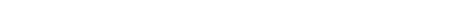
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## **UNIT-4**

- 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).



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