

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
 2. Figures to the right indicate full marks.
 3. Students answering in the regional language should refer in case of doubt to the main text of the paper in English.

- Q.1 Attempt **any three** of the following: 15
- a. What are the components of software process? Explain
 - b. Write a short note on Spiral Model
 - c. Explain the structure of Software Requirements Specifications.
 - d. Explain RAD model with its benefits and drawbacks.
 - e. Define Software Engineering. Explain Software Development Life Cycle.
 - f. What are the principles of Agile Method.
- Q.2 Attempt **any three** of the following: 15
- a. Explain Systems Engineering with disciplines involved in it.
 - b. Explain the four dimensions of Dependability.
 - c. Explain sequence diagram with an example.
 - d. Explain the simple critical system with suitable example
 - e. What are the three system organization styles of architectural design? Explain in brief.
 - f. Explain Requirements Validation Technique
- Q.3 Attempt **any three** of the following: 15
- a. Explain the risk management process.
 - b. What is Quality Assurance? What are the quality standard types? Explain
 - c. Write a short note on Architectural design decisions.
 - d. Explain in brief Extreme Programming.
 - e. Write a note on Process Scheduling.
 - f. Explain modular decomposition styles.
- Q.4 Attempt **any three** of the following: 15
- a. Explain the stages involved in static analysis.
 - b. Explain the software cost estimation technique.
 - c. Explain control flow graph with necessary diagrammatic representation
 - d. Explain Component Testing in detail.
 - e. With diagrammatic representation explain verification and validation model
 - f. What is the objective of software cost estimation?
- Q.5 Attempt **any three** of the following: 15
- a. Explain process improvement cycle.
 - b. State the process characteristics and describe each.
 - c. Explain CMMI process improvement framework.
 - d. Explain the process change process.
 - e. State the difference between COTS- Solution and COTS-Integrated Systems.
 - f. Describe Process Classification.