

Name of Specialization: Software Engineering

No. of Question: 50 (Objective Type)

Duration: 1 Hr. 30 Min

Maximum Marks:50

Software Life Cycle Models: SDLC Models, Selection of a Life Cycle Model. Software Requirements Analysis and Specifications: Requirements Engineering, Requirements Elicitation, Requirements Analysis, Requirements Documentation.

Software Project Planning: Size Estimation, Cost Estimation, Models, Constructive Cost Model, Software Risk Management. Software Design: Design Definition, Modularity, Strategy of Design, Function Oriented Design, IEEE Recommended Practice for Software Design Description, Object Oriented Design.

Software Metrics: Software Metrics, Token Count, Data Structure Metrics, Information Flow Metrics, Metrics Analysis. Software Reliability: Basic Concepts, Software Quality, Software Reliability Models, Capability Maturity Model.

Software Testing: Testing Process, Functional Testing, Structural Testing, Levels of Testing, Debugging, Testing Tools, Testing Metrics, Automated Testing.

Software Maintenance: Maintenance Process, Maintenance Models, Estimation of Maintenance

Costs, Regression Testing, Reverse Engineering, Software Re-engineering, Configuration Management.