LNCT UNIVERSITY, BHOPAL

EnrolmentNo...WCDBTC21096

CS-403
B.TECH (CS / AIML) IV SEMESTER (NEW BATCH)
EXAMINATION [JUNE-2025]
SOFTWARE ENGINEERING AND PROJECT MANAGEMENT

Maximum Marks:70   **Time Allowed:3Hours**

Note:-Attempt all questions. Internal choice are given.

(SECTION –A)

1. **Short answer type questions (Attempt any five)**   [5x6=30]

     i.   Discuss Agile Process Models

     ii.   Describe Use Case Modeling

     iii.   Explain Software Requirements Specification (SRS)

     iv.   Describe Key considerations in User Interface Design

     v.   Explain Software Quality Assurance (SQA)

     vi.   Describe Software Testing Life Cycle (STLC)

     vii.   Explain Test Case Design

(SECTION–B)

2. **Long answer type questions (Attempt any Four)**   [4x10=40]

     i.   Describe the Linear Sequential Model (Waterfall Model). What are its advantages and limitations?

     ii.   Explain the difference between function-oriented and object-oriented analysis modeling. Provide suitable diagrams or examples to highlight how each approach models system requirements.

     iii.   What is UML (Unified Modeling Language)? Describe any three UML diagrams used in software modeling

     iv.   Compare Object-Oriented Analysis and Design (OOAD) with Structured Software Engineering approaches. Discuss their impact on software maintainability

     v.   What are Black-Box and White-Box Testing techniques? Compare them with suitable examples.

     vi.   What is Software Configuration Management (SCM)? Discuss its key activities including version control, change control, and reporting.