

# LNCT UNIVERSITY, BHOPAL

EnrolmentNo.....

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.