

A-1151

Total Pages : 3

Roll No.

BCA(N)-302

Software Engineering

Examination February, 2026

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

Long Answer Type Questions (2×19=38)

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

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(1)

P.T.O.

1. Analyze different software life-cycle models and justify why Spiral Model is preferred for high-risk projects.
2. Describe the basic issues in software engineering and analyze how structured programming helps reduce software complexity ?
3. What is Domain Modelling ? Prepare a UML Class Diagram and explain relationships for an Online Food Delivery System.
4. Discuss User Interface Design principles. Provide an analytical comparison of command-line vs GUI vs web-based interfaces.
5. Explain Black-box, White-box, and Integration testing techniques. Analyze how each contributes to increasing software reliability.

Section–B

Short Answer Type Questions (4×8=32)

Note :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. What is formal requirement specification ?
2. Explain the use of state-chart diagrams.

3. Write short notes on any *two* of the following :
 - (a) Design Patterns
 - (b) Domain Modelling
 - (c) User Interface Components.
4. What are the characteristics of good user interface design ?
5. Write a short note on Black-box testing.
6. Explain staffing level estimation.
7. Define software reliability.
8. What is software reuse ?
