A-0796

Total Pages: 3 Roll No.

BCA-15

Bachelor of Computer Application (BCA) (Software Engineering)

Examination, June 2025

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) $2 \times 19 = 38$

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.

- 1. Define Software Engineering and explain why it is necessary for modern software development.
- Explain the role of a System Analyst in software development. Discuss the knowledge and qualities a System Analyst should possess.
- 3. What is Feasibility Study? Discuss its types and their importance in the software development process.
- 4. Compare and contrast the Waterfall Model, Spiral Model, and Prototyping Model with examples of their practical applications.
- Define Data Flow Diagrams (DFDs) and describe the different levels of DFDs with examples.

Section-B

(Short Answer Type Questions) $4 \times 8 = 32$

- **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 Coupling and Cohesion? Explain.
- 2. What is a Structured Chart ? Describe its significance in structured system design.

- 3. Explain Black-Box Testing and White-Box Testing.
- 4. Explain the concept of Feasibility Study and its role in software development.
- 5. What are the key components of a System Requirement Specification (SRS) ?
- 6. Why is it necessary to follow a Software Life Cycle Model?
- 7. What is a Decision Table ? Explain its importance in software design with an example.
- 8. Define a Data Flow Diagram (DFD). How is it used in system analysis?
