

A-1271

Total Pages : 3

Roll No.

BCA-15

Bachelor of Computer Application (BCA)

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.

A-1271

(1)

P.T.O.

1. What are the user transaction requirements ? Discuss various types of feasibility : technical, operational, economic, legal, and scheduling.
2. What is the Waterfall Model, and explain its advantages and limitations ? Compare the Waterfall Model with the Incremental Model.
3. Define a Data Flow Diagram (DFD) and explain its significance in system analysis, explain a DFD for an Online Admission System ,
4. Explain how structured and modular design concepts contribute to large-scale software development.
5. Define Black-Box Testing and explain its techniques with examples.

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. Explain the term ‘Fact Gathering’. Why is it essential in system analysis ?

2. Discuss how SRS helps in avoiding ambiguity between users and developers.
3. Explain the Prototyping Model and its application in user-centric systems.
4. Compare the Waterfall, Spiral, and Prototyping Models in terms of flexibility and user involvement.
5. Discuss the various components of an E-R Diagram with examples.
6. What are the principles of effective Output Design and its impact on usability ?
7. Discuss how low coupling and high cohesion improve software quality ?
8. What is Software Testing, and explain its importance in software development ?
