A–0793

Total Pages : 4 **Roll No. .....**

BCA-12

Bachelor of Computer Application (BCA)

(System Analysis and Design)

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) 2×19=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. Explain the various stages of the System Development Life Cycle (SDLC) and discuss their importance in system analysis and design.

2. Explain the role of a System Analyst in the context of Information Systems development. How do System Analysts contribute to the requirements gathering, design, implementation and maintenance of an IS ?

3. Explain the concept of feasibility study in system analysis and design. What are the different types of feasibility and why are they important ?

4. Describe the role of data flow diagrams (DFDs) in system analysis. How are DFDs used to represent data flow and system processes ?

5. Discuss the importance of system testing in the software development lifecycle. What are the different types of testing conducted during system design and development ?

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 are the key challenges in System Analysis and Design and how can they be addressed ?

2. Define tangible and intangible benefits and explain the difference between them in the context of a Cost Benefit Analysis.

3. How does System Testing ensure the success of an Information System ? Explain the different types of testing involved.

4. What are the advantages and disadvantages of using decision trees in system analysis and design ?

5. Define cohesion and describe how it measures the degree to which the elements within a single module are related to one another.

6. Define System maintenance and explain its role in keeping the system operational and aligned with evolving business requirements.

7. Define System Security and its relevance to System Analysis and Design.

8. Write short notes on the following :

(a) Physical and Abstract system

(b) MIS

(c) Prototyping

(d) Disaster Recovery Planning

****