

A-0849

Total Pages : 4

Roll No. -----

BCA-12

System Analysis and Design

Bachelor of Computer Application (BCA)

4th Semester Examination 2024(Dec.)

Time: 2:00 hrs

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into Two (02) Section 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.

P.T.O.

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Section-A (Long-Answer-Type Questions)

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.

[2x19=38]

- Q.1. Discuss the ethical and social responsibilities of a System Analyst when designing and implementing Information Systems. Explain how should a System Analyst address issues like data privacy, security and the ethical use of technology within an organization.
- Q.2. What is system planning in the context of System Analysis and Design? Explain its importance and describe the key activities involved in the system planning phase.
- Q.3. What is a feasibility study in System Analysis and Design? Explain its significance in the early stages of system development and how its helps to assess the viability of a proposed system.

- Q.4. Explain the difference between logical design and physical design. How does logical design focus on abstract system requirements, while physical design addresses hardware and software considerations for implementation?
- Q.5. Explain the process of system implementation. What factors should be considered during the deployment phase to ensure successful system implementation?

Section-B (Short-Answer-Type Questions)

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.

[4x8=32]

- Q.1. Discuss how SDLC provides a clear framework for project management, quality assurance, and alignment with user requirements.
- Q.2. What is Cost-Benefit Analysis (CBA) in system analysis and design, and why is it an essential part of the system development process?

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- Q.3. What is a structured chart, and how does it differ from a system flowchart in terms of representing system design?
- Q.4. What are decision trees in the context of System analysis and design, and how are they used to model decision-making processes in a system?
- Q.5. Discuss how coupling and cohesion are interrelated in software design and why both are important for achieving an effective design.
- Q.6. Explain how each type of testing ensures that the system is functioning as intended and is free from errors or bugs.
- Q.7. Define a Security Audit and explain its purpose in assessing the effectiveness of an Information System's security measures.
- Q.8. Write short notes on:
- a. ESS
 - b. Requirement gathering
 - c. Input media and devices
 - d. Structured design
