

18027

B.C.A. Examination, May-2025

INFORMATION SYSTEM ANALYSIS

DESIGN AND IMPLEMENTATION

(BCA-602)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from **all** sections as per instructions.

Section-A

(Very Short Answer Type Questions)

Note : Attempt all the **five** questions. Each question carries **3** marks. Very short answer is required not exceeding **75** words. $3 \times 5 = 15$

1. Define functional and non-functional requirement.

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2. Explain decision table.
3. Describe ISO 9000 quality models.
4. Describe the various strategies of design.
5. What factors influence software project planning?

Section-B

(Short Answer Type Questions)

Note : Attempt any **two** questions out of the following **three** questions. Each question carries **7½** marks. Short answer is required not exceeding **200** words. $7\frac{1}{2} \times 2 = 15$

6. What are the key challenges in Software Project Scheduling?
7. What is Object-Oriented Analysis and Design (OOAD)?
8. What are CASE tools, and why they are used?

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Section-C

(Long Answer Type Questions)

Note : Attempt any **three** questions out of the following **five** questions. Each question carries **15** marks. Answer is required in details. $15 \times 3 = 45$

9. (a) Explain about Capability Maturity Model (CMM) in detail.
(b) What is the difference between Logical and Physical Design?
10. (a) What is a Feasibility study and why is it conducted? <https://www.validcollege.com>
(b) What is Dynamic Modeling?
11. (a) What is DFD? Why it is important?
(b) How does an Entity-Relationship Diagram (ERD) help in data modeling.

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12. (a) What are the main phases of the System Development Life Cycle (SDLC)?
(b) How does Object-oriented Methodology differ from Structured System Analysis?
13. Write short notes on the following:
(a) Prototyping in Software Development
(b) Joint Application Development (JAD)
(c) Cost Estimation Techniques in Software Projects