



K25U 0930

Reg. No. : .....

Name : .....

IV Semester B.C.A. Degree (C.B.C.S.S. – O.B.E. – Regular/Supplementary/  
Improvement) Examination, April 2025  
(2019 to 2023 Admissions)  
Core Course  
4B08BCA : SOFTWARE ENGINEERING

Time : 3 Hours

Max. Marks : 40

PART – A  
(Short Answer)

Answer **all** questions.

(6×1=6)

1. What is software development life cycle ?
2. Define software product.
3. What are the different types of requirements in software engineering ?
4. What is the purpose of function-oriented design ?
5. Define object-oriented analysis.
6. What is alpha testing ?

PART – B  
(Short Essay)

Answer **any 6** questions.

(6×2=12)

7. Explain the importance of software characteristics.
8. Differentiate between functional and non-functional requirements.
9. What is feasibility study ? Explain briefly.
10. Describe the advantages of modularity in software design.

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11. What is the significance of object-oriented design methodologies ?
12. Differentiate between validation and verification in software testing.
13. Explain the concept of decision table-based testing.
14. What are the key steps in system testing ?

**PART – C**  
**(Essay)**

Answer **any 4** questions.

**(4×3=12)**

15. Compare the incremental and spiral models.
16. Explain the different types of requirement gathering techniques.
17. What are the key components of software design documentation ?
18. Explain different object-oriented design notations.
19. What are the different types of software testing techniques ?
20. Explain data flow testing with an example.

**PART – D**  
**(Long Essay)**

Answer **any 2** questions.

**(2×5=10)**

21. Explain different software process models with their advantages and disadvantages.
  22. Describe the various steps involved in requirement engineering.
  23. Explain function-oriented vs object-oriented design approaches with examples.
  24. Discuss different levels of software testing with examples.
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