D 110078   (Pages : 2)   Name...

                                                              Reg. No...................................

FIFTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2024

B.C.A.

BCA 5B 10—PRINCIPLES OF SOFTWARE ENGINEERING

(2019 Admission onwards)

Time : Two Hours   Maximum : 60 Marks

Section A (Short Answer Type Questions)

All questions can be answered.
Each correct answer carries a maximum of 2 marks.
(Ceiling 20 Marks)

1. What is the main difference between prescriptive and generic process models ?

2. Define the term 'Modularity" in the context of software engineering.

3. What is software quality dilemma ?

4. Name two agile modelling practices.

5. What are design classes in object-oriented design ?

6. Explain the term 'Refactoring' in software design.

7. What is data abstraction in design models ?

8. Describe the role of deployment diagrams in UML.

9. What is the purpose of exception handling in programming languages ?

10. Identify one key aspect of software maintenance.

11. What does DSDM stand for in agile process models ?

12. Explain the concept of functional independence.

Turn over

Section B (Paragraph/ Problem Type Questions)

All questions can be answered.
Each question carries 5 marks.
(Ceiling 30 Marks)

13. Illustrate the differences between Scrum and Extreme Programming.

14. Describe the process and importance of validating requirements.

15. Explain how information hiding contributes to software maintainability.

16. Discuss the role of architecture in the design process.

17. Discuss the impact of type checking on software reliability.

18. Explain the concept of software supportability and its importance.

19. Describe the strategies used in system testing.

Section C (Essay Type Questions)

Answer any **one** *of the following questions.*
The question carries 10 *marks.*

20. Elaborate on the software development life cycle and its phases.

21. Discuss the methodologies and benefits of business process re-engineering.

(1 × 10 = 10 marks)