

SUBJECT:- SOFTWARE ENGINEERING

CLASS:- BCA 4TH SEM

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1. What is Software Engineering? Explain its various paradigms in detail.
2. Explain the different phases of the Software Development Life Cycle (SDLC) with examples.
3. Compare the Waterfall Model and Spiral Model in software development. Highlight their advantages and disadvantages.
4. What is Agile Software Development? How is it different from the Prototyping Model?
5. What are the key tasks involved in the Software Requirements Engineering process? Explain each in detail.
6. Differentiate between Functional and Non-functional Requirements with suitable examples.
7. What is the Software Design Process? Explain the major steps involved in it.
8. Discuss the various types of Software Testing, such as Black Box, White Box, Unit, Integration, and System Testing.
9. What is Software Maintenance? Explain its different types with suitable examples.
10. What is Risk Management in Software Project Management? Discuss different types of risks and how to handle them.
11. What is Software Quality Assurance (SQA)? Discuss its importance and the techniques involved.
12. Explain the process of Software Configuration Management. What are its key activities?
13. What is Software Prototyping? Discuss different types of prototyping used in software development.
14. What is Software Project Planning? Explain Project Scheduling and discuss the reasons for software delivery delays.
15. What are Software Metrics and Software Measurements? Discuss their significance in software development.
16. What is Software Reuse and Software Reengineering? Discuss their advantages and challenges.
17. Explain Risk Identification and Risk Projection in Software Engineering with examples.
18. What is Software Reliability? Discuss the factors that affect software reliability.
19. What are Software Design Principles and Design Concepts? Explain with examples.
20. Explain the Software Testing Process and different Testing Criteria used in software testing.