

QUESTION PAPER

MODULE 1

PART A

1. Explain Sashimi Model. (2022)
2. How do you measure software reliability? (2021)
3. What is COCOMO estimation model? (2021,2022)
4. What is the need for software engineering? (2020)
5. Write a short note on project estimation methods in software development.(2020)

PART B

1. Explain Prototype. Also its types, advantages and disadvantages. (2022)
2. What are the characteristics of a Software? (2022)
3. Draw a waterfall model and explain the life cycle of a software system. (2021)
4. Prepare a basic software requirement specification for basic library system.(2021)
5. Explain predictive and adaptive waterfall models. How is it different from model in which development phases overlap each other? (2020)
6. With an example, explain requirement specification. (2020)

MODULE 2

PART A

1. Explain Literate Programming. (2022)
2. Explain Conformance Quality. What are the techniques used for ensuring conformance quality? (2022)
3. What are the four dimensions of software quality? (2021)
4. Explain the three states in which files reside in Git. (2021)
5. What are the basic concepts of version control system? (2020)

6. How software quality is measured? (2020)

PART B

1. Explain how to clone a Git repository. (2022)
2. Explain the four dimensions of quality.(2022)
3. What is a Git repository? Explain the process of Cloning a Git repository. (2021)
4. Explain how to view the commit history in Git. Write the syntax of the commands used.(2021)
5. Explain the core operations in Git Version Control System to manage a software project. Clone a repository using Git.(2020)
6. Explain the differences between “git fetch” and “git pull”. How can conflicts be resolved in git?(2020)

MODULE 3

PART A

1. Explain Unit testing. (2022)
2. What is Anti-Patterns? (2022)
3. What are the characteristics of a design class? (2021)
4. Define the concept of antipatterns. (2020)
5. What are assertions? (2020)
6. Discuss the importance of testing for expected errors in unit testing (2023)
7. How do you select an appropriate design pattern for a given problem or scenario? (2023)
8. .Explain the four essential elements of design pattern.(2024)
9. A design pattern may turn into an antipattern. Justify the statement (2024)

PART B

1. What is a Design pattern? Explain how to select a design pattern for your problem. (2022)

2. Explain xUnit architecture and write example for testing using any frame work (2022)

3. What are single condition tests and expected error tests in Unit Test? Explain.(2021)
4. Write a short note on creational design pattern. (2020)
5. Illustrate the importance of writing tests with assertions. (2020)
6. Explain the concept of anti-patterns and why they should be avoided in software design.
7. How design pattern is useful in software development? Explain in detail about different types of design patterns (2023)

MODULE 4

PART A

1. Explain Defect Life Cycle. (2022)
2. What is Regression Testing? (2022)
3. List out the steps in agile methodology. (2021)
4. Explain decision table testing with suitable diagram. (2021)
5. Define product backlog. (2020)
6. What is the relevance of software testing? (2020)
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8. What is agile process? Mention its characteristics (2023)
9. Explain pairwise testing and its advantages in reducing the number of test cases. (2023)

PART B

1. Explain Scrum framework. (2022)
2. Explain Black-Box testing and White-Box testing. Give any two techniques for each testing type. (2022)
3. Explain the meetings involved in scrum software development methodology.(2021)
4. What is blackbox testing? Explain. (2021)
5. With a neat diagram, explain the scrum framework. (2020)
6. Explain the relevance of bug life cycle with a neat diagram. (2020)
7. Explain the concept of black-box testing and its various techniques. (2023)
8. With a neat diagram, explain scrum framework (2023)
9. Define agility. Explain various agile design principles. (2023)
10. Write short notes on equivalence class testing and control flow testing (2023)

MODULE 5

PART A

1. Explain Version Control System? What is the purpose of using it? (2022)
2. Explain the benefits of Software Configuration Management? (2022)

3. What is the purpose of software configuration? (2020)
4. What is test automation? (2020)

PART B

1. Explain the principles of software delivery. (2022)
2. Define continuous integration. Explain the essential practices required for continuous integration.
(2021)
3. With a neat diagram, explain deployment pipeline and the various stages of deployment pipeline.
(2021)
4. What is CI/CD pipeline? Write the principles of software delivery. (2020)
5. Describe the process of managing build and deployment environments in a software development project
(2023)
6. Discuss the best practices for incorporating test automation into your software development process.
(2023)