

**ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY, CHIRALA**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**Frequently asked questions**

Subject: STM  
Name: Mr.D.N.V.SYAM KUMAR

Academic Year : 2017-18  
Year/Semester: IV-I-A

**UNIT-1**

1. Explain goals for testing and model for testing in software testing?
2. What is software testing? Explain about the myths and facts of it.
3. Explain about the software testing terminology with an example.
4. List any two goals of software testing.
5. Explain the model of testing in detail. Also render software testing life cycle model. Justify whether complete testing is possible or not.(16)
6. Define a model for software testing.
7. State the myths and facts about software testing.
8. Explore on software testing methodology in detail.
9. Briefly describe software testing life cycle.
10. List the goals of software testing
11. Explain in detail about the model of software testing.
12. Differentiate effective and exhaustive software testing.
13. Explain in detail the relationship between software test life cycle and software development life cycle.
14. Describe the features of software testing methodology.

**UNIT-2**

1. Define path testing and explain about decision and case statements.
2. Discuss about verification and validation with an example.
3. Explain about Cause-effect graph based testing and Decision table based testing.
4. State at least two differences between verification and validation.
5. Illustrate on Decision table based testing and Graph based testing.
6. Explore on verification of requirements.
7. List any two activities of validation testing.
8. Illustrate on Boundary Value Analysis and Equivalence class Testing techniques.
9. Explain in detail on how the verification of a code takes place.
10. Describe how does the verification of a code is done.
11. Explore in detail about black box testing techniques with examples and neat sketch.
12. Device the layout for boundary value analysis.
13. Differentiate between verification and validation.
14. Explore on State Table based testing and Error guessing.

### UNIT-3

1. Discuss about mutation testing.
2. Demonstrate an anomaly can be detected. Explain different types of data flow anomalies and data flow anomaly state graphs.
3. Write applications of data flow testing.
4. Define basis path testing.
5. Differentiate between white box testing and black box testing.
6. Briefly discuss the pros and cons of Inspections and Structured Walkthroughs.
7. Illustrate an example for loop testing.
8. Discuss on Basis path testing with a neat sketch.
9. How do you represent Graph matrices for testing process? Devise the same with example.
10. Discuss on technical reviews.
11. Differentiate between dynamic testing and static testing.
12. List the features of Technical reviews.
13. Define mutation testing.
14. Discuss on Loop testing and data flow testing techniques in detail.
15. Explain about basis path testing with an example.

### UNIT-4

1. Explain acceptance testing.
2. Illustrate between unit testing and integration testing with an example.
3. Explain about objectives and types of regression testing.
4. Illustrate functional testing.
5. Explain in detail about various validation techniques with examples.(16)
6. State the objectives of regression testing.
7. Differentiate between progressive and regressive testing process.
8. List various regression testing techniques.
9. Define unit testing.
10. Define regression. Devise the template for regression testability.
11. Explain about functional testing in detail.
12. State any two regression testing types.
13. Explain about unit testing with an example.
14. Discuss on Objectives of regression testing.

### UNIT-5

1. Why does a test suite grow? Explain.
2. Define a test case, test case design, test suite and explain how a test case designed for Travelling salesman problem.

3. Discuss about Software quality assurance metrics and its process.
4. Describe on test suit prioritization.
5. Discuss on how to minimize the test suit and its benefits.
6. Discuss on SQA models.
7. Differentiate between bug and error.
8. Describe various measures to prioritize test suit. Also explain about basics of testing management.(16)
9. State prioritization techniques.
- 10.Explain in detail about software quality metrics.
- 11.How is debugging different from testing. Illustrate with an example.
- 12.State any three Software Quality metrics.
- 13.Explain various types of bugs. Many different bugs might result in domain errors. Justify.(16)

### UNIT-6

1. Explain object oriented testing.
2. Explain about the categorization of testing tools and guidelines of automated testing.
3. Describe briefly about how the mobile systems are tested.
4. List any two commercial software testing tools.
5. Testing a web based system is a tedious job. Do you agree? Justify.
6. List various guidelines for automated testing process.
7. Briefly list any three challenges in testing web based software.
8. Categorize various testing tools necessary for testing.
9. Explore on testing mobile systems.
- 10.Explain in brief about object oriented software testing.
- 11.Discuss on cost issues incurred in selection of testing tools.
- 12.Explain about testing of web based systems.
- 13.List any two guidelines for automated testing.
- 14.Describe the testing process in object oriented structures.
- 15.List various types of testing tools with examples.

**ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY, CHIRALA**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**Assignment Questions**

Subject: STM  
Name: Mr.D.N.V.SYAM KUMAR

Academic Year : 2017-18  
Year/Semester: IV-I

**UNIT-1**

1. Explore on software testing methodology in detail.
2. Briefly describe software testing life cycle.

**UNIT-2**

1. Explain about Cause-effect graph based testing and Decision table based testing.
2. Illustrate on Boundary Value Analysis and Equivalence class Testing techniques.

**UNIT-3**

1. Discuss on Basis path testing with a neat sketch.
2. How do you represent Graph matrices for testing process? Device the same with example.

**UNIT-4**

1. Explain in detail about various validation techniques with examples.(16)
2. Define regression. Device the template for regression testability. State any two regression testing types.

**UNIT-5**

1. Define a test case, test case design, test suite and explain how a test case designed for Travelling salesman problem.
2. Discuss about Software quality assurance metrics and its process.

**UNIT-6**

1. Describe the testing process in object oriented structures.
2. List various types of testing tools with examples.

**FACULTY**

**HOD**