

**UNIT I****Chapter 1 : Basics of Software Testing and Testing Methods 1-1 to 1-42**

**Syllabus :** Software Testing, Objectives of Testing. Failure, Error, Fault, Defect, Bug Terminology. Test Case, When to Start and Stop Testing of Software (Entry and Exit Criteria). Verification and Validation (V Model), Quality Assurance, Quality Control. Methods of Testing Static and dynamic Testing The box approach : White Box Testing : Inspections, Walkthroughs, Technical Reviews, Functional Testing, Code Coverage Testing, Code Complexity Testing. Black Box Testing: Requirement Based Testing, Boundary Value Analysis ,Equivalence Partitioning.

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## UNIT II

### Chapter 2 : Types and Levels of Testing 2-1 to 2-35

**Syllabus** : Levels of testing, Unit Testing : Driver, Stub , Integration Testing : Top-Down Integration, Bottom-Up Integration, Bi-Directional Integration. Testing on Web Applications, Performance Testing : Load Testing, Stress Testing, Security Testing, Client-Server Testing. Acceptance Testing : Alpha Testing and Beta Testing. Special Tests : Regression Testing, GUI Testing

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## UNIT III

### Chapter 3 : Test Management 3-1 to 3-31

**Syllabus** : Test Planning : Preparing a Test Plan, Deciding Test Approach, Setting Up Criteria for Testing, Identifying Responsibilities, Staffing, Resource Requirements, Test Deliverables, Testing Tasks. Test Management : Test Infrastructure Management, Test People Management Test Process : Base Lining a Test Plan, Test Case Specification. Test Reporting : Executing Test Cases, Preparing Test Summary Report.

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#### UNIT IV

### Chapter 4 : Defect Management 4-1 to 4-22

**Syllabus :** Introduction, Defect Classification, Defect Management Process, Defect Life Cycle, Defect Template, Estimate Expected Impact of a Defect, Techniques for Finding Defects, Reporting a Defect.

#### UNIT V

### Chapter 5 : Testing Tools and Measurements

**5-1 to 5-27**

**Syllabus :** Manual Testing and Need for Automated Testing Tools, Advantages and Disadvantages of Using Tools, Selecting a Testing Tool, When to Use Automated Test Tools, Testing Using Automated Tools, Metrics and Measurement : Types of Metrics, Product metrics and Project Metrics, Object oriented metrics in testing ,Partitioning

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