

**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.

<ul style="list-style-type: none"> <li>1.1 Software Testing and Objectives of Testing..... 1 - 2</li> <li>1.1.1 Definition of Software Testing.....1 - 2</li> <li>1.1.2 Principles of Software Testing ..... 1 - 2</li> <li>1.1.3 Purpose of Testing ..... 1 - 3</li> <li>1.1.4 Objectives of Testing.....1 - 3</li> <li>1.1.5 Software Quality ..... 1 - 4</li> <li>1.2 Defect, Failure, Fault, Error, Bug Terminology..... 1 - 4</li> <li>1.3 What is Test Case?.....1 - 5</li> <li>1.4 When to Start and Stop Testing of Software ? ..... 1 - 6</li> <li>1.4.1 Entry Criteria ..... 1 - 7</li> <li>1.4.2 Exit Criteria.....1 - 7</li> <li>1.5 Skills for Software Tester..... 1 - 8</li> <li>1.6 Quality Assurance, Quality Control, Verification and Validation, V Model ..... 1 - 10</li> <li>1.6.1 Quality Assurance ..... 1 - 10</li> <li>1.6.2 Quality Control..... 1 - 10</li> <li>1.6.3 Differences between Quality Assurance and Quality Control ..... 1 - 11</li> <li>1.6.4 Verification and Validation ..... 1 - 11</li> <li>1.6.4.1 What is Verification ? ..... 1 - 12</li> <li>1.6.4.2 What is Validation? ..... 1 - 12</li> <li>1.6.4.3 Differences between Verification and Validation ..... 1 - 12</li> <li>1.6.5 V Model..... 1 - 12</li> </ul>	<ul style="list-style-type: none"> <li>1.6.5.1 Advantages of Vmodel ..... 1 - 13</li> <li>1.6.5.2 Disadvantages of Vmodel..... 1 - 14</li> <li>1.6.5.3 When V Model should be followed?..... 1 - 14</li> <li>1.7 Methods of Testing..... 1 - 14</li> <li>1.8 Static and Dynamic Testing..... 1 - 14</li> <li>1.8.1 Static Testing ..... 1 - 15</li> <li>1.8.2 Dynamic Testing ..... 1 - 15</li> <li>1.8.3 Difference Between Static and Dynamic Testing..... 1 - 15</li> <li>1.9 White Box Testing ..... 1 - 16</li> <li>1.9.1 Classification of White Box Testing ..... 1 - 17</li> <li>1.9.2 Static Testing ..... 1 - 17</li> <li>1.9.2.1 Types of Static Testing ..... 1 - 18</li> <li>1.9.2.1(A) Inspections..... 1 - 18</li> <li>1.9.2.1(B) Structured Walkthroughs..... 1 - 18</li> <li>1.9.2.1(C) Technical Review..... 1 - 19</li> <li>1.9.2.1(D) Comparison of Walkthroughs versus Inspections..... 1 - 19</li> <li>1.9.3 Structural Testing ..... 1 - 20</li> <li>1.9.3.1 Code Functional Testing..... 1 - 20</li> <li>1.9.3.2 Code Coverage Testing..... 1 - 20</li> <li>1.9.3.2(A) Program Statements and Line Coverage..... 1 - 21</li> <li>1.9.3.2(B) Branch Coverage ..... 1 - 22</li> <li>1.9.3.2(C) Condition Coverage..... 1 - 23</li> <li>1.9.3.3 Code Complexity Testing ..... 1 - 24</li> <li>1.9.3.3(A) Cyclomatic complexity and Control Flow Graph..... 1 - 25</li> <li>1.10 Black Box Testing..... 1 - 26</li> <li>1.10.1 Techniques for Black Box Testing ..... 1 - 27</li> <li>1.10.2 Requirement Based Testing ..... 1 - 27</li> <li>1.10.3 Positive and Negative Testing ..... 1 - 27</li> <li>1.10.4 Boundary Value Analysis..... 1 - 29</li> <li>1.10.5 Decision Tables..... 1 - 30</li> <li>1.10.6 Equivalence Partitioning ..... 1 - 34</li> <li>1.10.7 User Documentation Testing ..... 1 - 35</li> </ul>
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1.10.8	Graph Based Testing.....	1 - 36	2.3.5(B)	Perofmance Testing Types.....	2 - 14
1.10.9	Comparison between White Box Testing and Black Box Testing .....	1 - 37	2.3.5(C)	Performance Testing Process and Steps .....	2 - 17
1.10.10	Sample Examples on White and Black Box Testing.....	1 - 37	2.3.6	Security Testing .....	2 - 18
1.11	MSBTE Questions and Answers .....	1 - 39	2.3.7	Client/Server Testing.....	2 - 20
			2.3.7(A)	Layers in Client/Server Testing.....	2 - 22

**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

2.1	Unit Testing .....	2 - 2	2.5	Special Tests.....	2 - 28
2.1.1	Drivers.....	2 - 3	2.5.1	Regression Testing .....	2 - 28
2.1.2	Stubs.....	2 - 3	2.5.1.1	Regression Testing Techniques .....	2 - 29
2.1.3	Why Unit Testing Useful ? .....	2 - 4	2.5.1.2	Selecting Test Cases for Regression Testing.....	2 - 30
2.2	Integration Testing.....	2 - 5	2.5.1.3	Regression Testing Tools.....	2 - 30
2.2.1	Non-incremental Integration Testing (Big Bang or Umbrella).....	2 - 6	2.5.2	GUI Testing.....	2 - 31
2.2.2	Incremental Integration Testing .....	2 - 6	2.5.2.1	Approach of GUI Testing .....	2 - 32
2.2.3	Top-Down Incremental Integration Testing .....	2 - 6	2.5.2.2	GUI Testing Traits or Charactristics.....	2 - 32
2.2.4	Bottom-up Incremental Integration Testing.....	2 - 7	2.6	MSBTE Questions and Answers .....	2 - 33
2.2.5	Bi-Directional Integration Testing.....	2 - 7			
2.2.5(A)	Process of Bi-Directional Testing .....	2 - 8			
2.2.5(B)	Advantages .....	2 - 8			
2.2.5(C)	Disadvantages.....	2 - 8			
2.3	Testing on Web Applications .....	2 - 9			
2.3.1	Functional Testing .....	2 - 9			
2.3.2	Usability Testing.....	2 - 11			
2.3.3	Interface Testing.....	2 - 12			
2.3.4	Compatibility Testing .....	2 - 13			
2.3.5	Performance Testing .....	2 - 13			
2.3.5(A)	Performance Testing Criterias.....	2 - 14			

**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.

3.1	Test Planning .....	3 - 2
3.1.1	Preparing a Test Plan.....	3 - 3
3.1.2	Scope Management .....	3 - 5
3.1.3	Deciding Test Approach .....	3 - 5



3.1.4	Setting up Criteria for Testing .....	3 - 6	4.1	Introduction .....	4 - 2
3.1.5	Identifying Responsibilities .....	3 - 7	4.2	Defect Classification.....	4 - 2
3.1.6	Staffing and Training Needs .....	3 - 7	4.2.1	Defects in Software Products .....	4 - 5
3.1.7	Resource Requirements.....	3 - 7	4.3	Defect Management Process .....	4 - 7
3.1.8	Test Deliverables and Milestone.....	3 - 8	4.3.1	Defect Prevention Process .....	4 - 8
3.1.9	Testing Tasks.....	3 - 9	4.3.1.1	Defect Prevention Process Steps .....	4 - 8
3.2	Test Management .....	3 - 9	4.3.1.2	Techniques to Minimize Impact.....	4 - 11
3.2.1	Choice of Standards.....	3 - 9	4.3.1.3	Defect Prevention Cycle .....	4 - 11
3.2.1.1	External Standards .....	3 - 10	4.4	Defect Life Cycle .....	4 - 14
3.2.1.2	Internal Standards .....	3 - 10	4.4.1	Defect Report Template .....	4 - 16
3.2.2	Test Infrastructure Management.....	3 - 11	4.4.2	Defect Template.....	4 - 17
3.2.2.1	Elements of Test Infrastructure Management : TCDB and Defect Repository.....	3 - 12	4.4.3	Defect Attributes.....	4 - 18
3.2.2.2	Entity, Purpose and Attributes of Test Case Database (TCDB) and Defect Repository .....	3 - 13	4.5	Estimate Expected Impact of a Defect.....	4 - 18
3.2.3	Test People Management .....	3 - 14	4.5.1	Techniques for Finding Defects .....	4 - 19
3.2.4	Integrating with Product Release.....	3 - 16	4.5.2	Reporting a Defect .....	4 - 20
3.3	Test Process .....	3 - 16	4.6	MSBTE Questions and Answers .....	4 - 20
3.3.1	Base Lining a Test Plan.....	3 - 17			
3.3.2	Test Case Specification.....	3 - 17			
3.3.3	Update of Traceability Matrix .....	3 - 17			
3.4	Test Reporting.....	3 - 18			
3.4.1	Recommending Product Release .....	3 - 18			
3.4.2	Executing Test Cases.....	3 - 18			
3.4.3	Collecting and Analyzing Metrics.....	3 - 25			
3.4.4	Preparing Test Summary Report .....	3 - 26			
3.4.5	Types of Test Reports .....	3 - 28			
3.5	MSBTE Questions and Answers .....	3 - 29			

#### 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

5.1	Introduction .....	5 - 2
5.2	Manual Testing.....	5 - 2
5.2.1	Advantages and Disadvantages or Limitations of Manual Testing.....	5 - 2
5.2.2	Automated Testing Tools .....	5 - 4
5.2.2.1	Types of Test Automation Tools.....	5 - 4
5.2.2.2	Advantages of Test Automation Tools.....	5 - 7
5.2.3	Benefits of Automation Testing.....	5 - 8
5.2.4	Approaches of Automation Test .....	5 - 8
5.2.5	Need for Automated Testing Tools.....	5 - 9



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5.2.6	Differentiate between Manual Testing and Automation Testing .....5 - 10	5.5.2	Testing Using Automated Tools (Test Automation)..... 5 - 15
5.3	Advantages and Disadvantages of Using Tools .....5 - 11	5.6	Metrics and Measurement of Software Testing..... 5 - 16
5.3.1	Advantages of Using Tools.....5 - 11	5.6.1	Need of Metrics and Measurements ..... 5 - 17
5.3.2	Disadvantages of Using Tools .....5 - 12	5.6.2	Types of Metrics ..... 5 - 19
5.4	Selecting a Testing Tool .....5 - 13	5.6.3	Categories of Testing Metrics ..... 5 - 20
5.5	Automated Test Tools .....5 - 14	5.6.3.1	Product Metrics for Testing..... 5 - 21
5.5.1	When to use Automated Test Tools .....5 - 14	5.6.3.2	Process Metrics for Testing..... 5 - 22
		5.6.3.3	Object Oriented Metrics Used in Testing ..... 5 - 23
		5.7	MSBTE Questions and Answers ..... 5 - 26

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