SOFTWARE TESTING METHODOLOGY LABORATORY

VII Semester: CSE

Course Code	Category	Hours / Week			Credits	Maximum Marks		
		L	T	P	C	CIA	SEE	Total
AIT104	Core	-	-	3	2	30	70	100
Contact Classes: Nil	Tutorial Classes: Nil	Practical Classes: 48				Total Classes: 48		

OBJECTIVES:

The course should enable the students to:

I. Learn the importance of web testing tool and bug tracking tool.
II. Develop test case and test plan document for banking application.
III. Learn to write system specifications of any application and report various bugs in it.
IV. Use automated functional testing tool like Quick Test Professional.

COURSE LEARNING OUTCOMES (CLOs):

The students should enable to:

1. Implement and find practical solutions to the case tools problems.
2. Analyze online system and study its system specifications and report the various bugs.
3. Write down the test cases for any online system.
4. Design a test plan for library management system using testing tools.
5. Understand the benefits of win runner.
6. Execute how to do performance testing using testing tools including selenium.
7. Demonstrate the Bug Tracking Tool for Testing.
8. Simulate test cases for a software project using different testing and tracking tools.
9. Analyze different testing tools like test director and test link for web testing and bug tracking.
10. Demonstrate the Bug Tracking Tool for Testing.
11. Study of QTP (Quick Test Professional) automated functional testing tool
12. Analyze and design test cases for Matrix problem.

LIST OF EXPERIMENTS

Week-1	**CONSTRUCTS**

Write programs in C language to demonstrate the working of the following constructs:

a) while b) switch c) for d) if-else e) do-while

Week-2	**SYSTEM SPECIFICATIONS**

a. Study the system specifications of ATM system and report various bugs in it.

b. Study the system specifications of banking application and report various bugs in it.

Week-3	**TEST CASES**
a. Write the test cases for ATM system. b. Write the test cases for banking application	
Week-4	**TEST PLAN**
Create a test plan document for any application (e.g. Library management system).	
Week-5	**TESTING TOOL**
Study of any testing tool (e.g. Win runner).	
Week-6	**SELENIUM**
Study of web testing tool (e.g. Selenium).	
Week-7	**BUG TRACKING TOOL**
Study of bug tracking tool (e.g. Bugzilla).	
Week-8	**BUGBIT**
Study of bug tracking tool (e.g. Bugbit).	
Week-9	**TEST MANAGEMENT TOOL**
Study of any test management tool (e.g. Testdirector).	
Week-10	**OPEN SOURCE TESTING TOOL**
Study of any Open Source Testing Tool (e.g. Test Link).	
WeeK-11	**AUTOMATED FUNCTIONAL TESTING TOOL**
Study of QTP (Quick Test Professional) automated functional testing tool.	
Week-12	**INTROSPECTION OF MATRIX MULTIPLICATION**
A program written in C language for matrix multiplication fails, introspect the causes for its failure and write down the possible reasons for its failure.	

Text Books:

1. Boris Beizer, —Software Testing Techniques‖, Dream Tech Press, 2nd Edition, 2000.
2. Dr. K. V. K. K. Prasad, —Software Testing Tools‖, Dream Tech Press, Revised Edition, 2004.
3. Perry, —Effective methods of Software Testing, John Wiley, 2nd Edition, 1999.

Reference Books:

1. Paul Jorgensen, —Software Testing: A Craftsman's Approach‖, Auerbach Publications,3rd Edition, 2012.
2. P. C. Jorgensen, —Software Testing‖, Auerbach Publications, 3rd Edition, 2000.