Computer Science Paper X
Software Testing Tools
[SECC-I]

Semester: VI	Credits: 2	Subject Code: BS62210	Lectures: 36

Course Outcomes:

At the end of this course, the learner will be able to:
- Learn various software testing methods and strategies.
- Understand a variety of software metrics and identify defects and managing those defects for improvement in quality for given software
- Design test cases and test plans, review reports of testing for qualitative software
- Use latest testing tools used in the software industries.

Unit 1: Introduction to Test case design	4

- How to identify errors, bugs in the given application
- Design entry and exit criteria for test case, design test cases in Excel
- Describe features of a testing method used

Unit 2: Test cases for simple programs	4

- Write simple programs make use of loops and control structures.
- Write Test Cases for above programs.

Unit 3: Test cases and Test plan	4

- Write Test Plan for given application with resources required.
- Write Test case for given application.
- Prepare Test report for test cases executed.

Unit 4: Defect Report and Testing Tools	6

- Defects
  - Defect Life Cycle
  - Classification of Defect
  - Write Defect Report
  - Testing Tools
- How to make use of Automation Tools
  - Types of Testing Tools.

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Unit 5: Practical Assignments	18
• Demonstration of assignments on testing using any open-source testing tool	

Recommended Basic Reading:

- Rex Black, *Managing the Testing Process: Practical Tools and Techniques for Managing Hardware and Software Testing,* Microsoft Press, 1999
- Roger S. Pressman, *Software Engineering – A Practitioners Approach* 7thEdition, Tata McGraw Hill, 20
- Srinivasan Desikan, Gopalaswamy Ramesh, *Software Testing Principles and Practices,* Pearson.
- William E Perry, *Effective Methods of Software Testing,* 3rd Edition, Wiley Publishing Inc.

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