4/4 B.Tech. FIRST SEMESTER

IT7L1 SOFTWARE TESTING METHODOLOGIES LAB Credits: 4

Lecture: Internal assessment: 25 marks
Lab: 6 periods /week Semester end examination: 50 marks

Objectives:

To explain and discuss

- A test project, design test cases and data, conduct testing operations, manage software problems and defects, generate a testing report.
- Software test automation problems and solutions.
- About how to write software testing documents, and communicate with engineers in various forms.
- The techniques and skills on how to use modern software testing tools to support software testing projects.

Outcomes:

Student will be able to

- Apply software testing knowledge and engineering methods.
- Design and conduct a software test process for a software testing project.
- Understand and identify various software testing problems, and solve these problems by designing and selecting software test models, criteria, strategies, and methods.
- Use software testing methods and modern software testing tools for their testing projects

Exercises

- 1. The student should take up the case study of any relevant application (ex banking system, library information system etc) and Model it in different views i.e Use case view, logicalview, component view, Deployment view, Database design, forward and ReverseEngineering, and Generation of documentation of the project.
- 2. Write the test cases for the above application(manual testing).
- 3. Learn to use the following (or similar) automated testing tools to automate testing a.Win Runner/QTP for functional testing.
 - b. Load Runner for Load/Stress testing.
 - c. Test Director for test management.

(use these tools to carry out the functional testing, load/stress testing etc.,)

4. Student has to take up another case study of his/her own interest and do the same whatever mentioned in first problem.

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References:

- 1. Software Testing Concepts and Tools, P.NageswaraRao, dreamtech press.
- 2. Software Testing Tools, Dr. K.V.K.K. Prasad, dreamtech Press.
- 3. Software Testing with Visual Studio Team System 2008, S.Subashini, N.Satheesh.