

4/4 B.Tech. FIRST SEMESTER

IT7L2

PERFORMANCE ENGINEERING LAB

Credits: 2

Lecture:

Internal assessment: 25 marks

Lab: 3 periods /week

Semester end examination: 50 marks

Objectives:

To mould a student to implement and test

- Hyper thread concepts.
- Load processors
- RAID in a Network systems
- Client Server architecture
- Performance metrics.

Outcomes:

Students will be able to understand

- Performance of various processors
- Efficiency of RAID in a network
- Types of computer architectures
- Software scalability testing techniques

Exercises

- 1.Implement hyper threading concepts by taking an application
- 2.Implement a system test on applying a load on processors.
- 3.Implement a RAID in a network of systems
- 4.Write a java program using windows API
- 5.Write a Java program on Google API
- 6.Implement and demonstrate an application using client server architecture
- 7.Implement a program to check the performance metrics of computer system
- 8.Write a program to implement database deadlocks

Case study1:

Demonstrate various types of software scalability testing using any testing tool or a simulator.

Reference Book:

1. Software Performance and Scalability A Quantitative Approach, HerryH.Liu, Wiley Publishers.