## **Operating System Lab**

## **Objective:**

· To provide an understanding of the design aspects of operating system

## **Recommended Systems/Software Requirements:**

• Intel based desktop PC with minimum of 166 MHZ or faster processor with atleast 64 MB RAM and 100 MB free disk space

## **Lab Experiments:**

- 1. Simulate the following CPU scheduling algorithms
- a) Round Robin b) SJF c) FCFS d) Priority
- 2. Loading executable programs into memory and execute System Call implementation-read(), write(), open () and close()
- 3. . Multiprogramming-Memory management- Implementation of Fork(), Wait(), Exec() and Exit() System calls
- 4. Simulate all File allocation strategies a) Sequenced b) Indexedc) Linked
- 5. Simulate MVT and MFT
- 6. Simulate all File Organization Techniques
- a) Single level directory b) Two level c) Hierarchical d) DAG
- 7. Simulate Bankers Algorithm for Dead Lock Avoidance
- 8. Simulate Bankers Algorithm for Dead Lock Prevention.
- 9. Simulate all page replacement algorithms.
- a) FIFO b) LRU c) LFU etc....
- 10. Simulate Paging Technique of memory management.