

**SREENIVASA INSTITUTE of TECHNOLOGY and MANAGEMENT STUDIES  
(AUTONOMOUS)**

**I MCA - II Semester**

<b>L</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>3</b>	<b>2</b>

**16MCA125**

**OPERATING SYSTEMS LAB**

**Course Objectives:**

- The students are inculcate with various algorithms incorporated with Operating System are taught
1. Write C programs to implement the following i) standard I/O and ii) system calls.
  2. Simulate the following CPU scheduling algorithms
    - a) SJF    b) FCFS    c) Priority    d) Round Robin
  3. Simulate the following mutual procedure
    - a) Dining Philosopher Problem    b) Peterson Solution    c) Bounded Buffer
  4. Simulate all file allocation strategies
    - a) Sequential    b) Indexed    c) Linked
  5. Simulate Bankers Algorithm for DeadLock Avoidance
  6. Simulate the following Disk scheduling algorithm
    - a) FCFS    b) SSTF    c) LOOK    d) C-LOOK
  7. Simulate all page replacement algorithms such as
    - a) FIFO    b) Optimal    c) LRU

**Course Outcome:**

- The students are able to understand the usage of various algorithms regarding process management, primary & secondary storage management and file management in Operating System.