### **Savitribai Phule Pune University**

## T.Y.B.Sc. (Computer Science) - Sem - V

Course Type: DSEC - I Course Code: CS - 357 Course Title: Practical Course based on CS - 351

| Teaching Scheme: | No. of Credits: | Examination Scheme: |
|------------------|-----------------|---------------------|
| 5 Lect/ week     | 2               | IE: 15 marks        |
|                  |                 | UE: 35 marks        |

### **Course Objectives:**

- 1. To understand the concept of process scheduling with the help of simulation.
- 2. To study the concept demand paging concepts in operating system.
- 3. To understand the working of operating system shell.

# Course Outcomes: After completion of this course students will be able to understand the concept of

- 1. Process synchronization
- 2. Processes and Thread Scheduling by operating system
- 3. Memory management by operating system using with the help of various schemes

#### **Guidelines:**

- 1. Operating system platform Linux
- 2. Programming language C

### **List of Assignments:**

- Operations on processes: (2 slot)
  (Create a child process using fork() and commands like exec(),execv() and execvp())
- Simulation of Operating System Shell and its working (commands)(2 slots)
- Simulation of CPU Scheduling Algorithms FCFS, SJF, Priority and Round Robin(4 slots)
- Simulation of demand paging using memory page replacement algorithms FIFO,
  LRU, OPT, MFU(4 slots)