

# Department of Comp.Sci

## OPERATING SYSTEM Lab

*B.COM (VOC) 1st & 2nd SAM*

### *List of Experiments*

#### OPERATING SYSTEM PRACTICAL

1. File management system calls: Write a program to implement
  1. create a file
  2. Copy one file to another
  3. Linking a file
  4. Delete a file.
2. Directory management system calls: Write a program to change directory and print its Contents.
3. Parent process – Child process Relationship
4. Implementing IPC using pipes.
5. Simulation of scheduling algorithms: Write a program to implement the following process scheduling algorithms
  1. First Come First Serve
  2. Shortest Remaining Job First
  3. Round Robin
  4. Preemptive Priority Scheduling
6. Implementation of semaphore: Write a program that demonstrates how two processes can share a variable using semaphore.
7. Implementation of shell : Write a 'c' program to implement a shell.
8. Producer – Consumer Problem :  
Write a program to implement producer consumer problem ( Using POSIX semaphores).
9. To implement Banker's algorithm for a multiple resources
10. Shell scripts.
11. Dining Philosopher's problem
12. To study page replacement policies like
  - i) Optimal ; ii) Least recently used (LRU) ; iii) First-in-First-out



**GDC**  
**Memorial College**

*(Approved by Govt. of Haryana & Affiliated to M D University, Rohtak)*  
Bahal - 127 028 (Distt. Bhiwani) Haryana