B.Sc. (H) Computer Science Sem III (CBCS)

<u>C – VI Practical List for Operating Systems</u>

- 1. Write a program (using fork() and/or exec() commands) where parent and child execute:
 - a) same program, same code.
 - b) same program, different code.
 - c) before terminating, the parent waits for the child to finish its task, both for above mentioned cases a) and b)
- 2. Write a program to show how multiple fork() system calls work.
- 3. Write a program to report behaviour of Linux kernel including kernel version, CPU type and model. (CPU information)
- 4. Write a program to report behaviour of Linux kernel including information on configured memory, amount of free and used memory. (Memory information)
- 5. Write a program to print file details including owner access permissions, file access time, where file name is given as command line argument.
- 6. Write a program to copy files using system calls.
- 7. Write a program to implement FCFS scheduling algorithm.
- 8. Write a program to implement Round Robin scheduling algorithm.
- 9. Write a program to implement SJF scheduling algorithm.
- 10. Write a program to implement non-preemptive priority based scheduling algorithm.
- 11. Write a program to implement preemptive priority based scheduling algorithm.
- 12. Write a program to implement SRTF scheduling algorithm.
- 13. Write a program to calculate sum of n numbers using thread library.
- 14. Write a program to implement first-fit, best-fit and worst-fit allocation strategies.