**OS Assignment III**

Create two processes (one child process and one parent process) using fork call. Now print the messages "In child process" and "In parent process" in the child process and the parent process respectively.

(i) Both the processes should be able to print the ids of both the processes (child &

Parent).

(ii) The child process will print odd numbers in the range (1-20) and parent will print the

even ones respectively.

(iii) Introduce 1 sec sleep in both child and parent process. Modify the sleep in the child

process to sleep(2). What happens now?

(iv) Synchronize the parent process and child process in such a way that we can

get continuous numbers from 1-20 on the screen.

(iv) Use 'ps' command to see both these process are in the process table entry.

(vi) Also measure the performance of the getpid() system call and fork() system call.

Use gettimeofday to measure the system call execution time. Measure the

performance ten times for each of the two system calls and provide the timing

results and compute an average for each system call time requirement.