

**SHRI G.S. INSTITUTE OF TECHNOLOGY & SCIENCE**  
**Department of Computer Engineering**  
**C02 : Operating system**  
**Lab Assignment-I**

**The goal of the give a basic introduction of Operating System and Shell**

The/proc file system is a mechanism provided by Linux for the kernel to report information about the system and processes to users. The/proc file system is nicely documented in the proc man page. You can access this document by running the command man proc on a Linux system. Understand the system-wide proc files such as smeminfo and cpuinfo, and per-process files such as status, stat, limits, maps and so on.

**Now answer the following questions using the/proc filesystem.**

(a) Run command more /proc/cpuinfo and explain the following

terms:processor and cores. [Hint: Use lscpu to verify your definitions.]

(b) How many cores does your machine have?

(c) How many processors does your machine have?

(d) What is the frequency of each processor?

(e) How much physical memory does your system have ?

(f) How much of this memory is free ?

(g) What is total number of number of forks since the boot in the system ?

(h) How many context switches has the system performed since bootup ?