

SYS Software class revision

(Use Technical Words More)

Tricky Question ,Easy but read first carefully

- Soft Real time vs Hard Real time
- Gpos vs Rpos
- Type of Kernel in gpos and rpos
- Kernel in general
- Kernel subsystem (ls -l /boot/vmlinuz*)
- Uname -r or uname -a for kernel name
- Ubuntu version and details (lsb_release -a)
- Advantages vs Disadvantage of Monolithic Kernel
- Init vs systemd(single processor vs multiprocessor system)
- Purpose of mounting file system
- Inverted Tree structure(importance and reason)
- Hard link vs soft link
- Purpose of Virtual file system
- Procfs(3 words)
- Purpose of buffer cache
- Interaction between fd and Data Block
- Loop diagram
- Mandatory vs Record Lock

Process Management

- Context Switch
- System Context
- Process Priority (Range(0 - 139)
- Scheduling Policy(Reason of use of each policy over other)(Real time)
- Priority Inversion(Priority inheritance)
- Real time signal
- IPC POSIX (Not the kernel used in user level light)
- Multithreading
- State of process
- Interruptible and Uninterruptible sleep
- Zombie state
- Orphan Process
- TTY? Demon Process
- Kill -9 pid will this work on zombie
- Size of device special file(ls -l /dev/sda*) Hardisk Special file with partition number
- ll a.c
- Harddisk partition in sda (df -h | grep /dev/sda) sda root partition (sda file is interface to actual harddisk partition)
- IPC for socket programming
- Three way handshake
- System call for 3 way handshake
- Socket function
- What socket will do what connect do
- Close (as descriptor)

- Shutdown instead of close(purpose)

Exam Pattern

- *5 question(10 marks each) 2 hours(1 question have many partition)*
- *Technical terms*
- *No program but understand the use of system call and command*
- *1 ipc*
- *1 memory management*
- *1 process management*
- *1 kernel type and whole*
- *1 file management*