**Q1. Why a student should not study operating system?**

Operating system provides an interface between the users and hardware but sometimes unknown user can also access the system without one’s permission. OS usually provides little in the way of memory task or management features. Student must know the basics of OS before performing any task otherwise he would not be able to understand the task and its problem. Viruses can affect the OS and slow down its all processes and the responsiveness to manage the system.

Software in OS helps a lot but their complex structure can also be a problem to some students since they cannot understand everything like computer do when it comes to software. Types of OS can vary but most of them does not allow to switch task quickly and more easily. Often the OS does not support hardware and crashes due to which the data is lost hence it becomes difficult for the student to recover data. OS requires all the attention so that it could work properly otherwise problems may occur.

**Q2. What are driver modules in an operating system?**

Driver modules are the device drivers that helps the OS to support the devices and to manage the data transfer between the device and the OS. Driver can manage the physical devices. In the case of hardware devices, the device driver communicates with the hardware controller that manages the device. Device drivers runs the code that OS understand and allows devices to be manage and run properly.

**Q3. What is the difference between the file system of Linux and Window?**

Although they are the two kinds of OS but they work differently like windows uses Fat and NTFS as file system, while Linux uses a variety of file system. There are only limited no of tools in Windows but in Linux there is a large no of UNIX based recovery tools. Windows file system gets a drive letter like “C” but on Linux each file system gets a device like /dev/hd1. The device file is not an ordinary file, it is a special file.

On Windows the file system can be FAT32, FAT16 or NTFS while on Linux the files can be minix, ext or ext2. Linux also msdos and vfat for compatibility with Windows and Dows. On Linux there is no drive letters, so one file system is mounted on “/”. Linux files are ordered in tree structure. Windows cannot have two files in the same folder with same name but in Linux we can do that.

**Q4. What is Kernel is an operating system?**

Kernel being the most important thing in OS which controls all the task and manage all the operations of computer hardware. It shares a resources between various processes in such a way that there is uniform access to the resources. The memory management is also done by kernel so memory must be allocated and de allocated for its execution. It is important for the kernel to be as small as possible while still providing all the essential services required by other parts of the operating system and application execution. CPU usually executes the instruction in the kernel mode.