

UNIX SERVER ASSIGNMENT

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1. Interface role of the Unix Operating system

The UNIX shell provides the interface to the UNIX system and it receives input from the user and performs programs based on the user input. The output of the execution is then displayed to the user through the graphical user interface

2. State five variants of the UNIX operating system

- a. SunOS
- b. Solaris
- c. SCO UNIX
- d. AIX
- e. ULTRIX

3. Describe the five functions of the kernel

- a. Kernel provides an interface to the hardware devices as well as processes , memory and input output management
- b. Manage requests from the users via system calls
- c. Allocate resources to processes within the operating system
- d. Scheduling processes within the operating system
- e. Management of processes i.e. by allocating resources and managing resources that are shared by different processes

4. State six utility types of shell

- i. Bourne shell
- ii. C shell
- iii. TC shell
- iv. Korn shell
- v. Bourne Again shell

5. Using examples describe the three categories of files in UNIX

- a. Regular file – the most common file type and shows up in `ls -l` with a hyphen minus in the mode field e.g. `$ls -l /etc/passwd`.
- b. Directory file – the most common special file and it's layout is defined by the file system used. A directory is marked with a "d" as the first letter in the mode field e.g. `drwxr-xr-x 26 root root 4096 Sep 22 09:29 /`
- c. Symbolic link – a symbolic link is a reference to another file stored as a textual representation of the referenced file's path, marked with an "l" as the first letter of the mode string e.g. `lrwxrwxrwx ... termcp -> /usr/share/misc/termcap`

6. Define a file – a file is a unit of storage which stores data, information, settings or commands to be used by a computer program. An example is a text file which stores textual information in a computer to be later used.