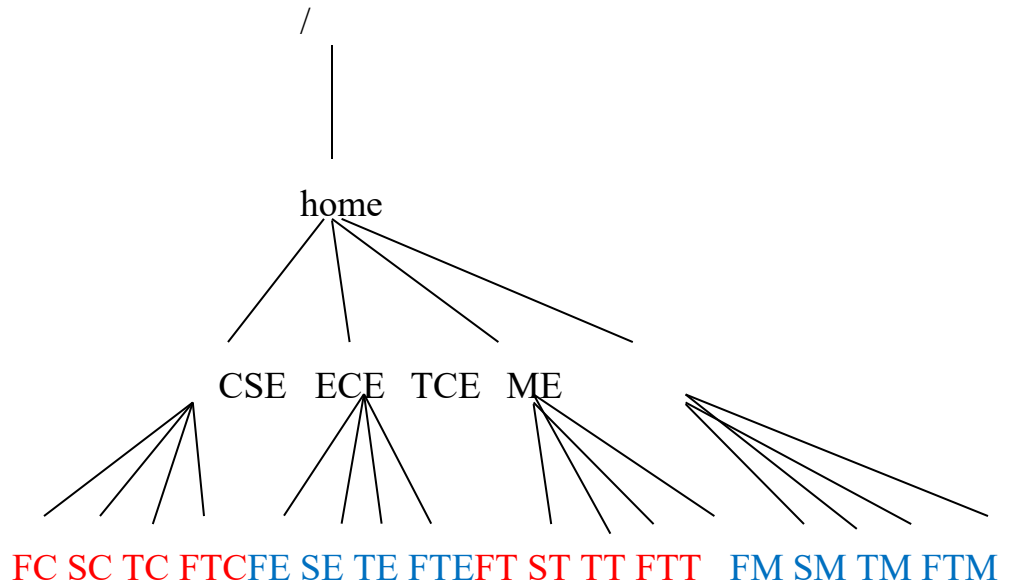


**K.S INSTITUTE OF TECHNOLOGY, BENGALURU-560109**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**18CS56–UNIX PROGRAMMING**  
**EXHAUSTIVE QUESTION BANK**  
**MODULE-I**

1. Explain the architecture of UNIX operating system with a neat diagram(8)
2. Illustrate with a neat diagram the typical UNIX file system and explain different types of files supported in UNIX.(8)
- 3. Explain/compare internal and External commands with examples(4)**
4. Explain salient features of UNIX operating system(7)
5. Explain parent child relationship of UNIX file system with a diagram.(6)
- 6. Explain with example Absolute pathname and relative pathname.(6)**
- 7. Describe command arguments and options with suitable examples (4)**
8. Define a file. With examples explain three categories of files supported by UNIX.(8)
9. **Briefly describe:** (6)
  - a. System call   b. PATH   c.HOME   d. date   e. who   f. ls
  - e. printf
10. How an ordinary user can become a superuser and vice versa? Explain with example.
- 11. Briefly describe commands with example** (8)
  - a. pwd                      b. cd                      c. mkdir                      d. rmdir
12. Name the command used for creating, deleting and changing directory. Explain with suitable syntax and example.

13. Write the command sequence for creating tree structure. Create a file by name country.txt in /home/CSE/FC, write the command to copy file country.txt from /home/CSE/FC to SE, TT and FTM directory.



14. Draw the tree structure of the file system created by the following commands (Assume you are in the directory /usr/office). Why is it not possible to issue the command `rmkdir /usr/office/right` (8)

`$mkdir left`

`$mkdir middle`

`$mkdir right`

`$ cd left`

`$mkdir left middle right`

`$cd ../middle`

`$mkdir dir1 dir2 /usr/office/right/dir3`

15. Assume you are in /home/Karthik, which of the following commands will work when executed in sequence? Explain the proper reason.

`mkdir a/b/c → mkdir a a/b`

`mkdir a a/b a/b/c → rmdir a/b/c → rmdir a a/b → mkdir a/p a/q a/p/r`

Draw the final tree for directory a. (7)

16. Explain the significance of dot (.) and double dots (..) notations to represent present and parent directories and their usage in relative path names.

17. Write the command line to perform the following

- a. Change current directory to home directory
- b. Change to parent of parent directory. (2)

18. Explain the following commands with suitable example for each.

- a. cat
- b. rm
- c. mv
- d. cp