

Class: BCA 4th Semester

Subject: OPERATING SYSTEM CONCEPTS AND LINUX

Short answer type questions:

1. What is an operating system?
2. Types of operating system?
3. Explain the architecture of an Operating System?
4. What is the difference by single task operating system and multitasking operating system?
5. What is system call? What are the various system calls? Explain the function of each of them?
6. Explain the process concept briefly with its states?
7. What is PCB? Explain in detail.
8. Give difference between a process and thread?
9. Comparison between preemptive and non-preemptive scheduling?
10. What is the role of short term scheduler, midterm scheduler, and long term scheduler?
11. What is round robin scheduling technique? Explain the effect of minimizing and maximizing the time slice?
12. What are the necessary conditions for a deadlock?
13. Short note on multitasking system?
14. What is multi programming?
15. What does MULTICS stand for?
16. What is Shell, Kernel?
17. What is home directory?
18. Explain cat command?
19. What is grep command?
20. What is a filter in UNIX?
21. What are wild card characters?
22. Purpose of who | sort command?
23. What is vi editor?
24. What is UNIX system administration?
25. What is system crash?
26. What is shell programming?
27. Explain the purpose of shell program?
28. What is use of && and ||?
29. What do you mean by environment variables?
30. What is the use of shift command?

Long answer type question:

1. Define operating system. What are the various types of operating system?
2. What is the difference between multiprogramming and multitasking?
3. Distinguish between batch and Distributed systems.
4. Discuss the features of UNIX operating system?
5. Compare and contrast UNIX and Windows operating system?
6. Describe the architecture of UNIX operating system.
7. What is sharing of files? How can file protection and security be maintained?
8. Explain any five file manipulation commands?
9. Explain any five system administrative commands?
10. Write short note on vi editor? What are the various modes of operation in vi editor?
11. Explain the role and function of system administrator in UNIX?
12. Describe in brief the process sequence while the system boots up?
13. What do you mean by system security? How a system can be secured and recovered from system failures or crash? Explain.
14. What is root account/super user in UNIX?
15. What sequence of steps is followed during shutting down UNIX system?
16. What do you mean by environment variables? How are they used by shell?
17. Write down a shell script to check whether number is odd or even?