

C 1135

(Pages : 2)

TEACHICS.ORG

SIXTH SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION, MARCH 2021

Computer Science
BCS 6B 12—OPERATING SYSTEMS
(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer all questions.
Each question carries 1 mark.*

1. What is the role of an operating system ?
2. What is a process ?
3. What is the default *umask* value in Linux ?
4. Which Linux command is used for setting file permission ?
5. Expand FCFS.
6. Give the name of any two process scheduling algorithms.
7. What do you mean by swapping ?
8. What is thrashing ?
9. What is TinyOS ?
10. Name any two mobile operating systems.

($10 \times 1 = 10$ marks)

Section B

*Answer at least four questions.
Each question carries 4 marks.
All questions can be attended.
Overall Ceiling 16.*

11. What is deadlock ? How it occurs ?
12. Explain the differences between *cp* and *mv* commands in Linux.
13. Explain the term critical section.
14. What are overlays ? Explain its use.
15. What is UNIX kernel ? Explain the role of Kernel in an Operating System.

($4 \times 4 = 16$ marks)

Turn over

Section C

*Answer at least four questions.
Each question carries 6 marks.
All questions can be attended.
Overall Ceiling 24.*

16. Compare and contrast time sharing and multiprogramming operating systems.
17. What is semaphore ? Explain its implementation.
18. Give an account on different file permissions in Linux.
19. What are the different types of shells available in Unix ? Explain any two.
20. Explain briefly any two CPU scheduling algorithm.
21. Differentiate between logical and physical file system layers.
22. Explain virtual memory concept.
23. Explain about various file protection mechanisms.

(4 × 6 = 24 marks)

Section D

*Answer any two questions.
Each question carries 15 marks.*

24. What is an Operating System ? Explain the evolution and types of different Operating Systems.
25. Explain the conditional and looping statements in Linux shell script with illustration.
26. Explain Round Robin scheduling algorithm with an example.
27. What is paging ? Explain the hardware support for implementing paging.
28. Explain the architecture and features of Mobile operating system.

(2 × 15 = 30 marks)