

17U632

(Pages: 2)

Name:

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2020

(CUCBCSS-UG)

CC17U BCS6 B12 - OPERATING SYSTEMS

Computer Science - Core Course

(2017 Admissions - Regular)

Time: Three Hours

Maximum: 80 Marks

PART I

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

1. Define the term mutual exclusion
2. What is a thread?
3. What is the use of **mv** command in shell scripting?
4. Define the term shell
5. What do you mean by throughput?
6. Write an example of a non-preemptive scheduling algorithm?
7. What is a physical address?
8. What is virtual memory?
9. Define the term encryption.
10. What is authentication?

(10 x 1 = 10 Marks)

PART II

Answer *all* questions. Each question carries 3 marks.

11. Write a note on Real-time systems?
12. What is the use of **grep** command using an example?
13. Write a note on the resource allocation graph?
14. What do you mean by segmentation?
15. What is access matrix?

(5 x 3 = 15 Marks)

PART III

Answer any *five* questions. Each question carries 5 marks.

16. Discuss Process Control Block?
17. Write notes on process termination?
18. Discuss on multi-level Feedback Queue scheduling
19. Write notes on the Critical section problem?

20. Discuss any three page replacement techniques with suitable example.
21. Explain steps in handling a page fault with a suitable diagram?
22. Explain break and continue in shell scripts with suitable examples?
23. Discuss the features of Mobile OS.

(5 x 5 = 25 Marks)

PART IV

Answer any *three* questions. Each question carries 10 marks.

24. Discuss on

- a) Deadlock Prevention
- b) Recovery from Deadlock

25. Explain different scheduling algorithms

26. What is paging? Discuss on

- a) Hierarchical Paging
- b) Hashed Paging
- c) Inverted Page Table

27. Distinguish Authentication and Authorization

28. a) Write a shell program to check whether a given number is even or not

- b) With suitable example discuss operators used in shell programming

(10 x 3 = 30 Marks)
