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SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE

(CUCSS)

Computer Science

CSS 2C 02—OPERATING SYSTEM CONCEPTS

(2014 Admissions)

Time : Three Hours Maximum : 36 WeightaAe

Part **A**

Answer all *questions.*

Each question carries 1 weightage.

1. List any two functions of an operating system.
2. Distinguish between process and thread.
3. What do you mean by mutual exclusion ?
4. What is message passing ?
5. What do you mean by demand paging ?
6. What is segmentation ?
7. What is priority inversion ?
8. Define IPC,
9. What is thrashing ?
10. What is real time operating system ?
11. Give the name of any two mobile operating systems,
12. What is distributed operating systems ?

(12 x 1 12 weight,age.

Part B

Answer any **six** *questions.*

Each question carries 2 *weightage.*

13. Explain the structure and contents of PCB.
14. Write a note on multithreading models.
15. What are semaphores ? Explain any *two* primitive semaphorenperations.
16. Explain the important features of process synchronization.
17. What is dynamic loading ? Explain how it differ from dynamic linking.
18. What is the significance of paging in memory management ? Explain.

19. Write a shorl. note on fi',1te M000tonv. schedunng,

20, Explain about. the Lutpienientation of a RPC.

21. Explain cluster computer architecture,

(6 x 2 = 12 weightae

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arty three *questions.*

.12a_ch question carries 4 *toeightage.*

22. Draw and egptato orace,., state transitions in UNIX.

23. Explain R61='.t,'1 algorithm with an example.

24. Explain ilt!ayn.lani. tar deadlock avoidance.

25. Consider the c. ' 2, 3, 4, 2, 1, 5, 6, 2, 1, 2, 3, 7, 6, 3, 2, 1, 2, 3, 6. How many page faults •::FS Lkal using 2 frames ?

26. Explain the · 'nlernuty.

27. Describe r1;: tlattc.lt a client-server model.

(3 >4 4 12 weightage