

B. SC. DEGREE END SEMESTER EXAMINATION - MARCH 2018**SEMESTER – 6: COMPUTER APPLICATION (CORE COURSE)****COURSE: 15U6CRCAP11: OPERATING SYSTEMS***(For Regular - 2015 Admission)*

Time: Three Hours

Max. Marks: 75

PART AAnswer **all** questions. Each question carries **1** mark.

1. Why paging is used as a memory management scheme in operating systems?
2. Define Response Time.
3. Expand TLB.
4. What is a Kernel?
5. List any two examples of Operating System.
6. What is Belady's Anomaly?
7. What do you meant by a system call?
8. What is an operating system?
9. What is Swapping?
10. Which scheduler controls the degree of multiprogramming? (1 x 10 = 10)

PART BAnswer **any eight** questions. Each question carries **2** marks.

11. What are the basic functions of Operating System?
12. What is synchronization? What are the different synchronization mechanisms?
13. What are the necessary conditions for a deadlock?
14. What is relative path and absolute path?
15. What are the states of a process?
16. Explain Scheduling criteria
17. What are the various IPC mechanisms?
18. What is a binary semaphore? What is its use?
19. What is a shell script?
20. Differentiate logical from physical address space. (2 x 8 = 16)

PART CAnswer **any five** questions. Each question carries **5** marks.

21. Explain segmentation
22. Explain the concept of batch processing.
23. Explain PCB
24. What are the different system calls used for process management in LINUX?

- 25. What is process synchronization?
- 26. Compare Semaphores and Monitors.
- 27. Explain Bankers algorithm (5 x 5 = 25)

PART D

Answer **any two** questions. Each question carries **12** marks.

- 28. Explain different file allocation methods
- 29. Describe different methods for handling deadlocks
- 30. Explain any two Page replacement Algorithms with suitable examples.
- 31. Explain different types of Operating Systems (12 x 2 = 24)
