

B. C. A. DEGREE END SEMESTER EXAMINATION – MARCH/APRIL 2018
SEMESTER – 2: BACHELOR OF COMPUTER APPLICATION (BCA) (CORE COURSE)

COURSE: 16U2CRBCA4 –: OPERATING SYSTEM

(Common for Regular 2017 / Supplementary - Improvement 2016 Admission)

Time: Three Hours

Max. Marks: 75

PART A

Answer **all** questions

1. Define throughput?
2. What do you mean by Batch Operating system?
3. What is a system call?
4. Define a Process?
5. Define demand paging.
6. What are Overlays?
7. What do you mean by dirty bit?
8. Define Cryptography?
9. What do you mean by Denial-of-service?
10. What is Kernel? (1 x 10 = 10)

PART B

Answer **any eight** questions

11. What is an Operating System?
12. What is Swapping? How is it performed?
13. Write the structure of a File system?
14. What is PCB?
15. Define term Safe state, Unsafe state and deadlock state.
16. What do you mean by Producer Consumer Problem?
17. How is page different from segment?
18. What is Virtual Memory?
19. Give short note on File sharing.
20. What do you mean by Page fault? (2 x 8 = 16)

PART C

Answer **any five** questions

21. Explain different states of a Process with a neat diagram.
22. Write short note on Semaphore.
23. Write short note on:- (i) Remote procedure call (ii) Remote method invocation.

- 24. Explain Critical Section Problem and its solutions.
- 25. Explain the working of Paging.
- 26. What is access matrix? Explain.
- 27. What do you mean by System threats? Explain. (5 x 5 =25)

PART D

Answer **any two** questions

- 28. Explain in detail about System Calls.
- 29. Write short notes on:- (i) Interprocess Communication(ii) Free space management in files.
- 30. What are the four necessary conditions for Deadlock? Explain Bankers deadlock avoidance algorithm.
- 31. Explain in detail about Program threats and System threats. (12 x 2=24)
