## BCA DEGREE END SEMESTER EXAMINATION MARCH 2017

### SEMESTER – 2: BACHELOR OF COMPUTER APPLICATION (BCA) (CORE COURSE)

### COURSE: 16U2CRBCA4 –: OPERATING SYSTEM

(*For Regular - 2016 admission*)

Time: Three Hours                                                                                    Max. Marks: 75

### PART A

#### Answer all questions

1. Define Operating System.
2. What do you mean by Multiprogramming?
3. Define Turnaround Time.
4. What do you mean by Thrashing?
5. What is virtual memory?
6. What do you mean by circular wait?
7. Define the terms pre emptive and non-pre emptive scheduling.
8. Define protection.
9. What is Worm?
10. What do you mean by compaction?                                               (1 x 10 = 10)

### PART B

#### Answer any eight questions

11. What is a System call?
12. What is Fragmentation? What are the two types of Fragmentation?
13. What is Firmware?
14. What is a Critical region?
15. What is a Hash table?
16. What is a Semaphore? What are the operations on a Semaphore?
17. What is mean by Segmentation?
18. What is File descriptors?
19. Define Program Threats?
20. What is Virus?                                                                               (2 x 8 = 16)

### PART C

#### Answer any five questions

21. Write a note on different types of Operating System.
22. Explain Demand paging with neat diagram.
23. Explain different file accessing methods.
24. What is Deadlock? What are the conditions necessary for Deadlock?
25. Explain in Detail about Context Switching.
26. Discuss two level Directory structure.
27. Explain different Security issues?                                                  (5 x 5 = 25)

### PART D

#### Answer any two questions

28. Explain in detail different Page replacement algorithms.
29. Explain various CPU Scheduling algorithms.
30. Explain different Deadlock Avoidance algorithms.
31. What are different user authentication methods? Explain.            (12 x 2 = 24)

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