B.C.A. DEGREE EXAMINATION, APRIL 2018 III YEAR - V SEMESTER Core Major- Paper XI - OPERATING SYSTEMS

Time : 3 Hours

Max.marks :75

Section A $(10 \times 2 = 20 marks)$

Answer any **TEN** questions

- 1. What is system calls?
- 2. Define operating system.
- 3. What is a semaphore?
- 4. Name the methods for handling deadlocks.
- 5. Write the idea of overlays.
- 6. What is segmentation?
- 7. What is virtual memory?
- 8. List the basic file operations.
- 9. What are worms and viruses?
- 10. Define encryption.
- 11. Define process.
- 12. Mention the significance of FIFO page replacement.

Section B $(5 \times 5 = 25 marks)$

Answer any **FIVE** questions

- 13. Explain the operating system services.
- 14. Briefly explain critical section problem.
- 15. Explain the logical and physical-address space.
- 16. Write a note on Demand Paging.
- 17. Discuss about I/O hardware.
- 18. Explain about monitors.
- 19. Write a note on file management systems.

P.T.O.

Section C $(3 \times 10 = 30 marks)$

Answer any \mathbf{THREE} questions

- 20. Discuss on interprocess communication
- 21. Explain the important aspects associated with deadlock avoidance.
- 22. Give an overview of contiguous memory allocation.
- 23. Write a detailed note on thrashing.
- 24. Describe Kernel I/O subsystem.