SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai — 600 044. BCA. END SEMESTER EXAMINATIONS APRIL-2022 SEMESTER - IV 20UCACT4006 - Operating System

Total Duration : 3 Hrs.

Total Marks : 60

Section A

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. What are the components of Operating system ?
- 2. Predict the rules for scheduling algorithms.
- 3. Relate the uses of semaphores.
- 4. Illustrate the various type of external fragmentation.
- 5. Define demand paging.
- 6. Classify access matrix in virtual memory.
- 7. Describe Kernal Modules in linux system ?
- 8. Relate the uses of thrashing in page replacement algorithm.

Section B

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. Show the importance of cooperative process in scheduling of operating system.
- 10. Examine the critical section in detail.
- 11. Compute the logical and physical address space of memory in swapping.
- 12. Assess the key elements of page replacement algorithms.
- 13. Examine the usage of memory management.
