20UCSCT5006

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. B.Sc.(CS) END SEMESTER EXAMINATIONS APRIL-2023 SEMESTER - V 20UCSCT5006 - Operating Systems

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

- 1. Explain the Operating System Services.
- 2. Describe the concept of Semaphores.
- 3. Relate the Internal and External Fragmentation.
- 4. Explain Demand Paging in detail.
- 5. Explain: Thrashing.
- 6. Classification on Deadlock Detection Algorithms.
- 7. Describe Multithreading.
- 8. Examine the concepts of Files and its access methods.

Section C

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

- 9. Illustrate on various Scheduling Algorithms available in Operating Systems.
- 10. Describe the various methods for handling Deadlocks.
- 11. Associate the Non-Contiguous Allocation concepts in Operating Systems.
- 12. Classify the page replacement algorithms and explain any two.
- 13. Examine the System Security and Program Threats in detail.
