21UCGCT1001

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.(CGS) - END SEMESTER EXAMINATIONS APRIL-2023 SEMESTER - I 21UCGCT1001 - Operating Systems

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. What are the operating system services that are helpful to the user?

2. Describe the various information associated with the PCB.

3. List down the benefits of Multithreaded programming in operating system.

4. Define the four necessary conditions that characterize deadlock.

5. Apply the FIFO, LRU techniques for page-replacement.

6. List down the names of various attributes of a file.

7. Write down the several forms of accidental and malicious security violations.

8. Describe about the structure of Operating System.

Section C

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

9. Explain about the different types of System Calls.

10. Explain about various Scheduling algorithms in detail.

11. Assess the most common techniques for structuring the page table.

12. Illustrate how pages are loaded into memory using demand paging.

13. Evaluate common methods by which programs cause security breaches.
