#### 22UAICT5005

# 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.AI - END SEMESTER EXAMINATIONS - NOV'2024 SEMESTER - V

# 22UAICT5005 - 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 concept of 'Inter-process communication'.
- 2. Sketch the structure of OS and describe it.
- 3. Apply the concept of synchronization in a classical problem.
- 4. Illustrate the concept of Semaphores.
- 5. Describe the concept of Swapping with an example.
- 6. Classify the File access methods.
- 7. Interpret the 'Allocation methods of file system'.
- 8. Determine the concept of 'User Authentication'.

## Section C

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

- 9. Classify the types of scheduling algorithms with suitable examples.
- 10. Predict the methods for handling Deadlocks.
- 11. Differentiate between Paging and Segmentation.
- 12. Categorize the 'Page replacement algorithms' with suitable examples.
- 13. Evaluate the process of 'Transforming 1/0 requests to hardware operations'.

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