



QP CODE: 23127028

Reg No : ......

# B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2023

## **Third Semester**

B.Sc Physics Model II Computer Applications

## **VOCATIONAL COURSE - CA3VOT06 - OPERATING SYSTEM**

2017 Admission Onwards 95428698

Time: 3 Hours

Max. Marks: 60

### Part A

Answer any **ten** questions.

Each question carries **1** mark.

- 1. Define kernel.
- 2. What is time sharing operating system?
- 3. What do you mean by process state transition?
- 4. When can we say that a process is in waiting state?
- 5. What is FCFS?
- 6. What is starvation?
- 7. Write a short note on Priority Non Preemptive (P-NP) algorithm.
- 8. Define SRTF Strategy.
- 9. How the Memory Management is useful?
- 10. What is paging?
- 11. What is the meaning of Deadlock?
- 12. Explain resource allocation graph.

 $(10 \times 1 = 10)$ 

Part B

Answer any **six** questions.

Each question carries **5** marks.



- 13. Write short note on Batch Operating System.
- 14. Explain various operating system services.
- 15. Write a short note on Process Scheduling.
- 16. What is a Job Queue?
- 17. What is priority scheduling? Explain pre-emptive and non pre-emptive versions of the same.
- 18. Explain round robin scheduling.
- 19. What are the different strategies using in fixed memory partition?
- 20. Briefly explain partition selection algorithms.
- 21. What is swapping? Explain.

 $(6 \times 5 = 30)$ 

### Part C

Answer any two questions.

Each question carries 10 marks.

- 22. List various functions performed by an operating system.
- 23. Explain the main steps to be performed by a dispatcher to perform its execution.
- 24. Discuss on the terms (i) Throughput (ii) Trunaround Time.
- 25. Narrate file structures and file access methods.

 $(2 \times 10 = 20)$