

QP CODE: 23104185

Reg No	:	
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# BCA DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, JANUARY 2023

### **Third Semester**

**Bachelor of Computer Applications** 

### **CORE COURSE - CA3CRT02 - OPERATING SYSTEMS**

2017 Admission Onwards

0CA2A982

Time: 3 Hours

Max. Marks: 80

Part A

## Answer any **ten** questions. Each question carries **2** marks.

- 1. Write about the evolution of OS.
- 2. What is the use of mode bit?
- 3. What are job scheduler and cpu scheduler?
- 4. What you mean by process termination?
- 5. Explain message passing system.
- 6. What are the requirements for critical section?
- 7. What are the basic operations of Semaphore?
- 8. What is Best fit Strategy?
- 9. What is segmentation ?
- 10. What is demand paging ?
- 11. What is meant by grouping?
- 12. What is disk scheduling ?

(10×2=20)





#### Part B

### Answer any **six** questions. Each question carries **5** marks.

- 13. What are the components of a computer system?
- 14. Write a short note user operating system interface.
- 15. Explain about multiple processor scheduling.
- 16. Explain Multilevel feedback queue scheduling.
- 17. Explain the dining philosophers problem of synchronization.
- 18. What is a monitor? Briefly explain.
- 19. Explain resource-allocation graph with an example.
- 20. Explain basic page replacement with the help of a diagram.
- 21. Explain contiguous allocation.

(6×5=30)

#### Part C

### Answer any **two** questions. Each question carries **15** marks.

- 22. Explain types of system calls.
- 23. Explain about Process Scheduling.
- 24. Expalin different methods for deadlock avoidance.
- 25. Explain paging hardware.

(2×15=30)