

QP CODE: 19102010



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Name

# **BCA DEGREE (CBCS) EXAMINATION, OCTOBER 2019**

### **Third Semester**

**Bachelor of Computer Application** 

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

2017 Admission Onwards

4A939AE3

Maximum Marks: 80

Time: 3 Hours

#### Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. What are the two fundamental approaches to interface with the OS?
- 2. List the Device management system calls
- 3. What is context switching?
- 4. What you mean by interprocess communication?
- 5. Differentiate turn around time and waiting time
- 6. What is critical section of a process?
- 7. Write the syntax of a monitor
- 8. What is Dynamic Linking?
- 9. What is segmentation?
- 10. What is meant by page replacement?
- 11. What is meant by sequential access?
- 12. What is meant by disk scheduling?

 $(10 \times 2 = 20)$ 

## Part B

Answer any six questions.

Each question carries 5 marks.

13. Briefly explain about the evolution of OS



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Turn Over



- 14. Discuss about OS Operations
- 15. With a neat diagram explain process states
- 16. Explain process creation and process termination
- 17. Define Semaphore. How Semaphore is implemented?
- 18. Explain resource-allocation graph with an example
- 19. How deadlock can be prevented?
- 20. Explain the concept of virtual memory
- 21. Explain file system structure with the help of a diagram

 $(6 \times 5 = 30)$ 

Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Explain the functions of OS
- 23. Briefly explain the types of Scheduling Algorithm with example
- 24. What are the different classic problems of synchronization? Explain
- 25. Explain paging hardware

 $(2 \times 15 = 30)$ 

