



QP CODE: 21100450



21100450

Reg No : .....

Name : .....

**BCA DEGREE (CBCS) EXAMINATION, MARCH 2021**

**Third Semester**

Bachelor of Computer Applications

**Core Course - CA3CRT02 - OPERATING SYSTEMS**

2017 Admission Onwards

A8B97639

Time: 3 Hours

Max. Marks : 80

**Part A**

*Answer any **ten** questions.*

*Each question carries 2 marks.*

1. List the functions of OS.
2. What do you mean by Dual-mode operation.
3. List the stages of process states.
4. Explain the term buffering.
5. What you mean by CPU utilization?
6. What is critical section problem?
7. What is a deadlock?
8. What is limit register?
9. What is the speciality of virtual memory?
10. What is meant by page replacement?
11. List file operations.
12. What is disk scheduling?

(10×2=20)

**Part B**

*Answer any **six** questions.*

*Each question carries 5 marks.*

13. Write a short note on OS Structure.





14. Write a short note on user operating system interface.
15. Explain process creation and process termination.
16. With an example, explain Round Robin scheduling.
17. Explain Semaphore.
18. Explain the Readers-Writers problem of synchronization.
19. How deadlock can be prevented?
20. Explain paging.
21. Explain file system structure with the help of a diagram.

(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. What is deadlock detection and recovery? Explain.
25. Explain segmentation.

(2×15=30)

