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.

$(6\times5=30)$

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.

$(2\times15=30)$