## B.Sc DEGREE (CBCS)EXAMINATION, MARCH 2021

### Third Semester

Bachelor of Computer Application

### VOCATIONAL COURSE - CA3VOT06 - OPERATING SYSTEM

2017 Admission Onwards

69FB1785

Time: 3 Hours                                                                Max. Marks : 60

### Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Define Soft Real-Time Systems?

2. Name the main Operating System Services.

3. What are I/O bound processes?

4. What is a scheduler?

5. What is a Dispatcher?

6. What do you mean by Balanced Utilization of Resources?

7. Write a short note on Priority Non Preemptive (P-NP) algorithm.

8. What is Shortest Remaining Time First (SRTF)   scheduling?

9. What are Bare Machines?

10. What is best fit?

11. What is the difference between swapping in and swapping out?

12. What are different conditions that cause a deadlock to occur?

(10×1=10)

### Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Describe the different views of an operating system.

14. Compare multiprocessor O and personal computer OS

15. What are the different Process states?

16. What is the meaning of Scheduling Criteria?

17. Differentiate between HRN , SJF and FCFS scheduling algorithms.

18. Explain round robin scheduling.

19. What are the different strategies using in fixed memory partition?

20. What is paging? What is FIFO page replacement algorithm?

21. Describe the importance and implementation of resource allocation graph.

(6×5=30)

## Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the Objectives and functions of OS.

23. Explain FCFS scheduling with example.

24. What is pre-emptive scheduling? Explain the different pre-emptive scheduling algorithm with respective Gantt charts.

25. Narrate file structures and file access methods.

(2×10=20)