23104221

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, JANUARY 2023

Third Semester

B.Sc Physics Model II Computer Applications

VOCATIONAL COURSE - CA3VOT06 - OPERATING SYSTEM

2017 Admission Onwards

AF27995A

Time: 3 Hours   Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What do you mean by System View of an Operating System.?

2. In what manner does jobs are executed in Batch Operating System?

3. What is Process ?

4. What do you mean by scheduling?

5. What is dispatcher?

6. What is a Dispatcher?

7. What is FCFS ?

8. What is starvation?

9. What are the different memory allocation strategies?

10. What is deadlock?

11. Explain resource allocation graph.

12. Write a note on different file access methods.

(10×1=10)

Part B

13. Describe the different views of an operating system.

14. Compare multiprocessor O and personal computer OS.

15. Explain the fields present in a Process Control Block.

16. Explain the role played by the priority in a process scheduling.

17. Write s short on Shortest remaining time first.

18. Consider three processes P1, P2, and P3 with same arrival time at t=0 . Their response time is shown in the following table. Assuming that the time slice is 4 ms. How will these processes be scheduled according to Round robin scheduling ? Compute average waiting time and average turnaround time.

19. What is static binding?.Explain.

20. Briefly explain partition selection algorithms.

21. Differentiate between paging and segmentation.

(6×5=30)

Part C

22. Describe the various Operating system services.

23. Discuss on the terms (i) Throughput (ii) Trunaround Time.

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

25. Explain various page replacement algorithms.

(2×10=20)