



DON BOSCO COLLEGE

(Affiliated to the University of Calicut)

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SECOND INTERNAL EXAMINATION MARCH 2019

SIXTH SEMESTER BCA

BCA6B12: FUNDAMENTALS OF OPERATING SYSTEMS

Time: 3hours

Total Marks: 80

Part -A

Answer all questions

1. The current activity of the process is _____.
2. The systems which allows only one process execution at a time, are called:
A. uniprogramming systems **B.** uniprocessing systems **C.** unitasking systems **D.** none of the mentioned
3. What is Scheduling?
4. Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
5. Define race condition.
6. The TestAndSet instruction is executed :
A. after a particular process **B.** periodically **C.** atomically **D.** None of these
7. An OS is an _____ that manages the computer hardware.
8. The interval from the time of submission of a process to the time of completion is termed as:
A. waiting time **B.** turnaround time **C.** response time **D.** throughput
9. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called:
A. job queue **B.** ready queue **C.** execution queue **D.** process queue
10. Define Busy Waiting?

(10*1 =10 marks)

Part - B

Answer any five questions

11. What is starvation and aging?
12. What is cpu burst and i/o burst with an example?
13. Explain wait() semaphore .
14. Explain FCFS.
15. What is PCB and process states?
16. Explain TCSH.

(5*3 =15 marks)



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Part – C

Answer all questions

17. Explain classical problems of synchronization.
18. Explain CPU scheduling
19. Explain scheduling criteria.
20. What is virus? Explain different types of virus.
21. What is a Critical Section problem? Give the conditions that a solution to the .

(5 *5=25marks)

Part – D

Answer all questions

22. Explain semaphore with advantages and disadvantages.
23. Explain process scheduling algorithms: 1)SJF 2)Priority scheduling.
24. Explain process synchronization.

(3 *10=30marks)
