

Operating System Objective Questions

1. In priority scheduling algorithm, when a process arrives at the ready queue, its priority is compared with the priority of _____

- a) all process
- b) currently running process
- c) parent process
- d) init process

Answer: b

2. Which algorithm is defined in Time quantum?

- a) shortest job scheduling algorithm
- b) round robin scheduling algorithm
- c) priority scheduling algorithm
- d) multilevel queue scheduling algorithm

Answer: b

3. Process are classified into different groups in _____

- a) shortest job scheduling algorithm
- b) round robin scheduling algorithm
- c) priority scheduling algorithm
- d) multilevel queue scheduling algorithm

Answer: d

4. In multilevel feedback scheduling algorithm _____

- a) a process can move to a different classified ready queue
- b) classification of ready queue is permanent
- c) processes are not classified into groups
- d) none of the mentioned

Answer: a

5. Which one of the following can not be scheduled by the kernel?

- a) kernel level thread
- b) user level thread
- c) process

d) none of the mentioned

Answer: b

6. Which module gives control of the CPU to the process selected by the short-term scheduler?

a) dispatcher

b) interrupt

c) scheduler

d) none of the mentioned

Answer: a

7. 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

Answer: b

8. A process is selected from the _____ queue by the _____ scheduler, to be executed.

a) blocked, short term

b) wait, long term

c) ready, short term

d) ready, long term

Answer: c

9. In the following cases non – preemptive scheduling occurs?

a) When a process switches from the running state to the ready state

b) When a process goes from the running state to the waiting state

c) When a process switches from the waiting state to the ready state

d) All of the mentioned

Answer: b

10. The switching of the CPU from one process or thread to another is called _____

a) process switch

b) task switch

c) context switch

d) all of the mentioned

Answer: d

11. What is Dispatch latency?

a) the speed of dispatching a process from running to the ready state

b) the time of dispatching a process from running to ready state and keeping the CPU idle

c) the time to stop one process and start running another one

d) none of the mentioned

Answer: c

12. Scheduling is done so as to _____

a) increase CPU utilization

b) decrease CPU utilization

c) keep the CPU more idle

d) none of the mentioned

Answer: a

13. Scheduling is done so as to _____

a) increase the throughput

b) decrease the throughput

c) increase the duration of a specific amount of work

d) none of the mentioned

Answer: a

14. What is Turnaround time?

a) the total waiting time for a process to finish execution

b) the total time spent in the ready queue

c) the total time spent in the running queue

d) the total time from the completion till the submission of a process

Answer: d

15. Scheduling is done so as to _____

a) increase the turnaround time

b) decrease the turnaround time

c) keep the turnaround time same

d) there is no relation between scheduling and turnaround time

Answer: b

16. What is Waiting time?

- a) the total time in the blocked and waiting queues
- b) the total time spent in the ready queue
- c) the total time spent in the running queue
- d) the total time from the completion till the submission of a process

Answer: b

17. Scheduling is done so as to _____

- a) increase the waiting time
- b) keep the waiting time the same
- c) decrease the waiting time
- d) none of the mentioned

Answer: c

18. What is Response time?

- a) the total time taken from the submission time till the completion time
- b) the total time taken from the submission time till the first response is produced
- c) the total time taken from submission time till the response is output
- d) none of the mentioned

Answer: b

19. CPU scheduling is the basis of _____

- a) multiprocessor systems
- b) multiprogramming operating systems
- c) larger memory sized systems
- d) none of the mentioned

Answer: b

20. With multiprogramming _____ is used productively.

- a) time
- b) space
- c) money
- d) all of the mentioned

Answer: a

21. What are the two steps of a process execution?

- a) I/O & OS Burst
- b) CPU & I/O Burst
- c) Memory & I/O Burst
- d) OS & Memory Burst

Answer: b

22. An I/O bound program will typically have _____

- a) a few very short CPU bursts
- b) many very short I/O bursts
- c) many very short CPU bursts
- d) a few very short I/O bursts

Answer: c

23. Which is the most optimal scheduling algorithm?

- a) FCFS – First come First served
- b) SJF – Shortest Job First
- c) RR – Round Robin
- d) None of the mentioned

Answer: b

24. The real difficulty with SJF in short term scheduling is _____

- a) it is too good an algorithm
- b) knowing the length of the next CPU request
- c) it is too complex to understand
- d) none of the mentioned

Answer: b

25. The FCFS algorithm is particularly troublesome for _____

- a) time sharing systems
- b) multiprogramming systems
- c) multiprocessor systems
- d) operating systems

Answer: b

26. Preemptive Shortest Job First scheduling is sometimes called _____

- a) Fast SJF scheduling
- b) EDF scheduling – Earliest Deadline First
- c) HRRN scheduling – Highest Response Ratio Next
- d) SRTN scheduling – Shortest Remaining Time Next

Answer: d

27. An SJF algorithm is simply a priority algorithm where the priority is _____

- a) the predicted next CPU burst
- b) the inverse of the predicted next CPU burst
- c) the current CPU burst
- d) anything the user wants

Answer: a

28. Choose one of the disadvantages of the priority scheduling algorithm?

- a) it schedules in a very complex manner
- b) its scheduling takes up a lot of time
- c) it can lead to some low priority process waiting indefinitely for the CPU
- d) none of the mentioned

Answer: c

29. What is 'Aging'?

- a) keeping track of cache contents
- b) keeping track of what pages are currently residing in memory
- c) keeping track of how many times a given page is referenced
- d) increasing the priority of jobs to ensure termination in a finite time

Answer: d

30. A solution to the problem of indefinite blockage of low – priority processes is _____

- a) Starvation
- b) Wait queue
- c) Ready queue
- d) Aging

Answer: d

31. Which of the following scheduling algorithms gives minimum average waiting time?

- a) FCFS

- b) SJF
- c) Round – robin
- d) Priority

Answer: b

32. The portion of the process scheduler in an operating system that dispatches processes is concerned with _____

- a) assigning ready processes to CPU
- b) assigning ready processes to waiting queue
- c) assigning running processes to blocked queue
- d) all of the mentioned

Answer: a

33. Complex scheduling algorithms _____

- a) are very appropriate for very large computers
- b) use minimal resources
- c) use many resources
- d) all of the mentioned

Answer: a

34. What is FIFO algorithm?

- a) first executes the job that came in last in the queue
- b) first executes the job that came in first in the queue
- c) first executes the job that needs minimal processor
- d) first executes the job that has maximum processor needs

Answer: b

35. The strategy of making processes that are logically runnable to be temporarily suspended is called _____

- a) Non preemptive scheduling
- b) Preemptive scheduling
- c) Shortest job first
- d) First come First served

Answer: b

36. What is Scheduling?

- a) allowing a job to use the processor

- b) making proper use of processor
- c) all of the mentioned
- d) none of the mentioned

Answer: a

37. Orders are processed in the sequence they arrive if _____ rule sequences the jobs.

- a) earliest due date
- b) slack time remaining
- c) first come, first served
- d) critical ratio

Answer: c

38. Which of the following algorithms tends to minimize the process flow time?

- a) First come First served
- b) Shortest Job First
- c) Earliest Deadline First
- d) Longest Job First

Answer: b

39. Under multiprogramming, turnaround time for short jobs is usually _____ and that for long jobs is slightly _____

- a) Lengthened; Shortened
- b) Shortened; Lengthened
- c) Shortened; Shortened
- d) Shortened; Unchanged

Answer: b

40. Which of the following conditions must be satisfied to solve the critical section problem?

- a) Mutual Exclusion
- b) Progress
- c) Bounded Waiting
- d) All of the mentioned

Answer: d