

Question

If the wait for graph contains a cycle :

Answer

then a deadlock exists

Question

An edge from process P_i to P_j in a wait for graph indicates that :

Answer

P_i is waiting for P_j to release a resource that P_i needs

Question

The wait-for graph is a deadlock detection algorithm that is applicable when :

Answer

all resources have a single instance

Question

The content of the matrix Need is :

Answer

Max - Allocation

Question

The data structures available in the Banker's algorithm are :

Answer

All of the options

Question

The Banker's algorithm is _____ than the resource allocation graph algorithm.

Answer

less efficient

Question

The resource allocation graph is not applicable to a resource allocation system :

Answer

with multiple instances of each resource type

Question

If no cycle exists in the resource allocation graph :

Answer

then the system will be in a safe state

Question

All unsafe states are :

Answer

not deadlocks

Question

A system is in a safe state only if there exists a :

Answer

safe sequence

Question

The dining - philosophers problem will occur when there are _____

Answer

5 philosophers and 5 chopsticks

Question

If the semaphore value is negative :

Answer

its magnitude is the number of processes waiting on that semaphore

Question

The signal operation of the semaphore basically works on the basic _____ system call.

Answer

wakeup()

Question

The wait operation of the semaphore basically works on the basic _____ system call.

Answer

block()

Question

The main disadvantage of spinlocks is that :

Answer

they require busy waiting

Question

Spinlocks are :

Answer

All of the options

Question

The two atomic operations permissible on semaphores are :

Answer

wait

Question

Semaphore is a/an _____ to solve the critical section problem.

Answer

integer variable

Question

The TestAndSet instruction is executed :

Answer

atomically

Question

An un-interruptible unit is known as :

Answer

atomic

Question

Bounded waiting implies that there exists a bound on the number of times a process is allowed to enter its critical section :

Answer

after a process has made a request to enter its critical section and before the request is granted

Question

Mutual exclusion implies that :

Answer

if a process is executing in its critical section, then no other process must be executing in their critical sections

Question

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

Answer

All of the options

Question

The segment of code in which the process may change common variables, update tables, write into files is known as :

Answer

critical section

Question

There are 10 different processes running on a workstation. Idle processes are waiting for an input event in the input queue. Busy processes are scheduled with the Round-Robin time sharing method. Which out of the following quantum times is the best value for small response times, if the processes have a short runtime, e.g. less than 10ms?

Answer

$t_Q = 15\text{ms}$

Question

Scheduling is :

Answer

all of the options

Question

The strategy of making processes that are logically runnable to be temporarily suspended is called :

Answer

Preemptive scheduling

Question

With round robin scheduling algorithm in a time shared system,

Answer

using very large time slices converts it into First come First served scheduling algorithm

Question

Round robin scheduling falls under the category of :

Answer

Preemptive scheduling

Question

Response time is :

Answer

the total time taken from the submission time till the first response is produced

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