OS

1) Which of the following are used in Inter Process Communication(IPC)

A) Semaphores

B) Pipe

C) Message Queue

D) All of these

Ans-D

2)Is the following Statement True/False

By Mutual Exclusion, we mean that if one process is executing inside critical section then the

other process must not enter in the critical section.

A) true

B) false

C) Depends

D) None of these

Ans-A

3)

The OS defines a time quantum (slice). All the processes will get executed in the cyclic way. Each of the process will get the CPU for a small amount of time (called time quantum) and then get back to the ready queue to wait for its next turn. It is a preemptive type of scheduling.

What is the name of Scheduling Algorithm

### A) Shortest Job First

### B) Shortest remaining time first

C) Highest Response Ratio Next

D) Round Robin

Ans-D

4)

The reference String is given as 0 1 5 3 0 1 4 0 1 5 3 4.

How many Page Faults occur in the above case (FIFO Page Replacement Algorithm)

1. 9
2. 8
3. 7
4. 10

Ans-A

**Case 1: Number of frames = 3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Request | 0 | 1 | 5 | 3 | 0 | 1 | 4 | 0 | 1 | 5 | 3 | 4 |
| Frame 3 |  |  | 5 | 5 | 5 | 1 | 1 | 1 | 1 | 1 | 3 | 3 |
| Frame 2 |  | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 |
| Frame 1 | 0 | 0 | 0 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| Miss/Hit | Miss | Miss | Miss | Miss | Miss | Miss | Miss | Hit | Hit | Miss | Miss | Hit |

Number of Page Faults = 9

5) What is Turn Around Time ?

A) Turn Around Time = Completion Time + Arrival Time

B) Turn Around Time = Completion Time - Arrival Time

C) Turn Around Time =  Arrival Time – Completion Time

D) None of these

Ans-B