

Importance Question

Answer the following (Any Four)

- Explain types of operating systems
- Explain the types of operating system managers
- Explain types of system devices
- Explain multi-processing , multi programming and multitasking
- Explain test and set, wait and signal

Answer the following (Any one)

- Explain semaphores and mutex
- Explain any two cases of deadlocks

Answer the following (Any Two)

- Differentiate Fixed partition and Dynamic partition scheme
- Differentiate Paging and Segmentation
- Differentiate Best Fit and First Fit allocations.

Answer the following

Given that main memory is composed of 3 page frames. How many page faults will occur using FIFO and LRU algorithms for the following request list :

0 1 7 2 0 3 2 1 0 3 2 1 3

Calculate success to failure ratio and success percentage

Answer the following (Any Two)

- Explain Process control block
- Explain job scheduler and process scheduler
- Explain process state diagram

Answer the following (Any two)

- Explain Producer Consumer Problem
- Explain typical multiprocessing configurations
- Explain non-contiguous physical storage allocation

Solve the following

Process	P1	P2	P3	P4	P5
Burst Time	8	4	9	6	5

Draw charts for : FCFS , SJF , Priority and Round Robin (quantum = 3 ms)
Calculate average waiting time and average turnaround time.

Answer the following (Any two)

- Explain deadlock and conditions for deadlock to occur
- Explain deadlock prevention
- Explain deadlock recovery
- Explain data compression

Answer the following (Any one)

- Explain the components of I/O Subsystem
- Explain contiguous physical storage allocation

