**Types of OS and their advantage and disadvantage**

* Batch Processing OS
* Multiprogramming OS
* Multitasking OS
* Multiprocessing OS
* Time sharing OS
* Real Time OS
* Distributed OS

**Difference btw Multiprogramming and multiprocessing**

**Operating system structure**

* System components or management
* Process management
* Main Memory management
* File management

**Operating system services**

* System call
* Type of system call
* Process control

**Process Management**

* Process concept
* Process control block
* CPU Scheduling
* Process Scheduling
* Context Switch
* Operating on process

**Threads**

* Introduction
* Benefits
* Types of Thread
* Thread issues

**CPU Scheduling**

* Scheduling criteria
* Turnaround time
* Waiting time
* Response time
* Scheduling algorithm
  + FCFS
  + SJF ( shortest job first scheduling )
  + Priority Scheduling
  + Preemptive
  + Round robin
* Multilevel feedback queue
* Multiple processor scheduling
  + Symmetric
  + Asymmetric
* Algorithm evolution
  + Maximum CPU utilization
  + Maximum through put
* Process Synchronization
* Two types
  + Cooperative process
  + Independent process
* Critical Section
* Algorithms