

## **Topics and sub topics of Chapter 1 Introduction**

1. What Operating Systems Do
  - a. User View
  - b. System View
  - c. Defining OS
2. Computer-System Organization
  - a. Interrupts
  - b. Storage structure
  - c. I/O structure
3. Computer-System Architecture
  - a. Single Processor Operating System
  - b. Multi Processing Operating System
  - c. Clustered System
4. Operating-System Operations
  - a. Multiprogramming
  - b. Multi Processing
  - c. Dual Moed
  - d. Multi Mode
  - e. Timer
5. Security and Protection
6. Computing Environments
  - a. Traditional Computing
  - b. Mobile Computing
  - c. Client Serve Computing
  - d. Peer to peer Computing
  - e. Cloud Computing
  - f. Real Time Embedded System

## **Topics and sub topics of Chapter 2 Operating System Structure**

1. Operating System Services
2. User and operating system Interface
  - a. Command Line Interface
  - b. Graphical User Interface
  - c. Touch Screen Interface
  - d. Choice of interface
3. Systems
  - a. Example
  - b. Application Program Interface
  - c. Types of System calls
4. System Services
5. Linker and Loader
6. Operating System Structures
  - a. Monolithic
  - b. Layered

- c. Modules
- d. Microkernels
- e. Hybrid

### **Topics and sub topics of Chapter 3 Processes**

1. Process Concept
  - a. Process
  - b. Process State
  - c. Process Control Block
  - d. Threads
2. Process Scheduling
  - a. Scheduling Queues
  - b. CPU scheduling
  - c. Context Switches
3. Operations on Processes
  - a. Process creation
  - b. Process Termination
4. Interprocess Communication