Unit-1

INTRODUCTION

Contact Hours:15

Introduction to the Operating System

Introduction to Operating Systems, Operating System Structure, Main Functions and characteristics of Operating Systems, Types of Operating Systems, System calls, Types of system calls, System programs.

Process Management

Process Concept, Process Control Block, Process Scheduling, Threads, CPU Scheduling : Preemptive/ Non Preemptive Scheduling, Scheduling Criteria, Scheduling Algorithms, inter-process communication, remote procedure calls, Process Synchronization

Deadlocks

Deadlock characterization and conditions for deadlock, deadlock prevention, Deadlock avoidance-safe state, resource allocation graph algorithm, Banker’s algorithms-Safety algorithm, Deadlock detection,





