Introduction : Operating system and functions, Classification of Operating systems- Batch,

Interactive, Time sharing, Real Time System, Multiprocessor Systems, Multiuser Systems,

Multiprocess Systems, Multithreaded Systems, Operating System Structure- Layered structure,

System Components, Operating System services, Reentrant Kernels, Monolithic and Microkernel

Systems. CPU Scheduling: Scheduling Algorithms, Performance Criteria, Process States, Process Transition

Diagram, Schedulers, Process Control Block (PCB) Dining Philosopher

Problem, Sleeping Barber Problem; Semaphores, Process Synchronization