

Operating System

Assignment 1 (Unit 1)

1. Write down Kernel and its types.
2. Explain Different types of Operating System.
3. Give the 5 applications of Operating System.
4. What is Spooling with the example?
5. Write different types of Distributed OS.

Assignment 2 (Unit 2)

1. What is Critical Section?
2. What is Mutual Exclusion?
3. Describe the Dining Philosophers Problem and its solution.
4. Give the solution of Reader-Writer Problem.
5. What is Producer-Consumer Problem?

Assignment 3 (Unit 3)

1. Write down the 4 conditions of Deadlocks and explain deadlock.
2. Give the names of Preemptive and Non-Preemptive algorithms and differentiate both of these.
3. Consider the following 5 processes with B.T, A.T. and their priorities, find Avg Waiting Time and Turn around Time.

Process	Burst Time	Priority	Arrival Time
P ₁	10	3	5
P ₂	1	1	2
P ₃	2	3	0
P ₄	1	4	4
P ₅	5	2	6

4. Write down the functions of O.S.
5. Find Avg Waiting Time and Turn around Time using Round Robin Algorithm if TQ=5

Process	B. T.	A.T.
P ₁	5	0
P ₂	7	1
P ₃	3	3
P ₄	1	1