

Chandigarh Engineering College-CGC Landran
Department of Electronics and Communication Engineering

Assignment No. 1

Subject and Subject code: Operating System (BTCS-402-18)

Semester- 6th

Date on which assignment given: 12-02-2024

Date of submission of assignment 16-02-2024

Total Marks-10

Course Outcomes

CO1:	Explain basic operating system concepts such as overall architecture, system calls, user mode and kernel mode.
CO2:	Distinguish concepts related to processes, threads, process scheduling, race conditions and critical sections.
CO3:	Analyze and apply CPU scheduling algorithms, deadlock detection and prevention algorithms.
CO4:	Examine and categorize various memory management techniques like caching, paging, segmentation, virtual memory, and thrashing.
CO5:	Design and implement file management system.
CO6:	Appraise high-level operating systems concepts such as file systems, disk-scheduling algorithms and various file systems.

Bloom's Taxonomy Levels

L1- Remembering,	L2- Understanding,	L3- Applying,	L4-Analyzing,	L5- Evaluating,	L6- Creating
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Assignment related to COs		Marks Distribution	Relevance to CO No.	Blooms Level
Q1.	Explain (a) Real Time Scheduling Algorithm (b) Earliest Deadline First Scheduling Algorithm	1.5 1.5	CO-1	L5
Q2.	Compare Window and Unix operating System.	2	CO-1	L4
Q3.	Explain the Hardware solution and Petersons solution for the critical section problem.	2	CO-2	L2
Q4.	(a) Define Deadlock (b) Comment on the necessary and sufficient conditions for deadlock to occur?	1 2	CO-3	L1 L3

