

		<b>Parul University</b> <b>Faculty of Engineering and Technology</b> <b>Parul Institute of Engineering and Technology</b> <b>CSE- Cyber Security Department</b>		
Subject Name	Operating System and Platform Security		A. Y	2025-26
Subject Code	3012602PC01		Semester	2 <sup>nd</sup>
<b>Assignment-1</b>				
Sr No	Question	COs	B.T	Competence
1	Define an Operating System. Write any two main functions of an OS.	1	1	Remember
2	List and briefly explain any two types of Operating Systems (e.g., Batch, Real-time, Distributed, Cloud-based).	2	2	Understand
3	What are system calls? Mention any two OS services provided to users or programs.	3	3	Apply
4	Explain the difference between Monolithic and Microkernel OS structure in simple terms.	3	3	Understand
5	What is a process? List the basic states of a process in an operating system.	4	4	Understand
6	Define threads. Write any two benefits of multithreading.	4	4	Understand
7	What is virtual memory? Why is it needed in modern operating systems?	3	3	Understand
8	What is memory protection? How does ASLR (Address Space Layout Randomization) help in improving security?	5	5	Understand