Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India

(Autonomous Institute Affiliated to University of Mumbai)

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
CPCL502	**Operating System Lab**	--	--	2	--	--	1	1
		Examination Scheme						
		ISE		ESE				Total
				Practical		Oral		
		40		20		-		60

Pre-requisite Course Codes	CPC502(Operating System)

At end of successful completion of this course, student will be able to

	CO1	Compare performance of various CPU scheduling algorithm.
	CO2	Demonstrate deadlock detection and avoidance algorithm.
Course Outcomes	CO3	Create processes and implement IPC
	CO4	Demonstrate file and memory allocation strategies.
	CO5	Demonstrate process synchronization.
	CO6	Develop mini project

Exp. No.	Experiment Details	Ref.	Marks
1	Implement CPU scheduling algorithm.	1,2	5
2	Implement Producer consumer problem using Semaphore.	1,2,3	5
3	Implement bankers algorithm for deadlock avoidance.	1,2	5
4	Implement threading and synchronization application.	1,2,3	5
5	Implement system calls for mv,cp.	4,5	5
6	Implement disk scheduling algorithm	1,2	5
7	BIOS CMOS and BOOT process : Study BIOS setting security	4,5	5
8	Develop Mini Project	1,2,3	5
	Total Marks		**40**

References:

[1] Silberschatz A., Galvin P., Gagne G. "Operating Systems Principles", Willey Eight edition

[2] William Stallings,"Operating System-Internal & Design Principles", Pearson

[3] Andrew S. Tanenbaum, "Modern Operating System", Prentice Hall.

[4] Maurice J. Bach,""The Design of Unix Operating System", Prentice Hall.

[5] B. M. Harwani, "Unix and Shell Programming", Oxford