Code No: R1922053 **R19** SET - 1

II B. Tech II Semester Regular Examinations, August/September - 2021
OPERATING SYSTEMS
(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit
All Questions carry **Equal** Marks
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1	a)	Explain in detail about clustered systems.	[8M]
	b)	Describe examples of Windows and UNIX system calls.	[7M]
		Or	
2	a)	What is dual-mode operation? Explain in detail.	[8M]
	b)	Discuss about layered approach of operating systems.	[7M]
3	a)	Explain about shared-memory systems.	[8M]
	b)	Explain the concept of race conditions that occur in Inter process communication.	[7M]
		Or	
4	a)	Describe CPU-I/O burst cycle and preemptive scheduling with an example.	[8M]
	b)	Explain about the producer-consumer problem using threads.	[7M]
5	a)	What is address binding? Explain with a neat diagram.	[8M]
	b)	Describe the basic mechanism of memory-mapped files.	[7M]
		Or	
6	a)	Discuss in detail about memory allocation.	[7M]
	b)	Explain about LRU-approximation page replacement. Algorithm.	[8M]
7	a)	Describe disk space management in detail.	[8M]
	b)	Discuss about deadlock detection with one resource of each type.	[7M]
		Or	
8	a)	Explain about an example program using file-system calls.	[8M]
	b)	Discuss in detail about stable storage implementation.	[7M]
9	a)	What are design principles of the Linux system? Explain.	[8M]
	b)	Explain about implementing security defenses.	[7M]
		Or	
10	a)	Discuss about networking in Windows XP system.	[8M]
	b)	What are goals of protection? What are principles of protection?	[7M]
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Code No: R1922053 **R19** SET - 1

II B. Tech II Semester Supplementary Examinations, February - 2022
OPERATING SYSTEMS
(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit
All Questions carry **Equal** Marks
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1	a)	Explain about Linus and BSD UNIX operating systems.	[8M]
	b)	Discuss about Solaris 10 D Trace dynamic tracing facility.	[7M]
		Or	
2	a)	Discuss in detail about operating system structure.	[8M]
	b)	Describe the concept of system boot in detail.	[7M]
3	a)	Discuss about execution of remote procedure call.	[8M]
	b)	Explain in detail about multicore programming.	[7M]
		Or	
4	a)	What scheduling? Explain about thread scheduling.	[8M]
	b)	Discuss in detail about the dining philosophers problem.	[7M]
5	a)	Explain about memory allocation and fragmentation.	[8M]
	b)	What are basic concepts of demand paging? Explain.	[7M]
		Or	
6	a)	Define swapping. Explain swapping with a neat diagram.	[8M]
	b)	What is the cause of thrashing? Explain about working-set model.	[7M]
7	a)	Explain about file naming and file structure.	[8M]
	b)	Describe deadlock detection with multiple resources of each type.	[7M]
		Or	
8	a)	Give an overview of disk structure.	[8M]
	b)	Discuss in detail about file system backups.	[7M]
9	a)	Explain about programmer interface of Windows XP.	[8M]
	b)	Discuss in detail about revocation of access rights.	[7M]
		Or	
10	a)	What is access matrix? Explain implementation of access matrix.	[8M]
	b)	Discuss about security as a security tool.	[7M]
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