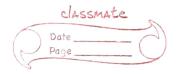
Ans-2	Process synchronization is the task of coordinating
	the execution of processes in a way that no two
	process can have access to some shared resource.
-	It is needed especially in multiprocess systems.
->	Critical Section is a code which can be accessed by a
	signal process at a specific point of time.
	The section consists of resources that are needed to
production of the second	be accessed by other processes.
	Entay is handled by -> quait()
	Entry is handled by -> quait() Exit -> signal().
	· · · · · · · · · · · · · · · · · · ·
	In voitical section only a single process can be accessed
	or executed, others conit.
=	Rules
-	. Mutual Exclusion => it is a type of binary
	semaphase which is used to
	control access of resources. Not more than one mocess
	control acress of resources. Not more than one process com execute at same time.
2.	Progress: - It is used when no process is in critical
	section, and some process ments to get
	in. In the remainder section will be decided which
	process will go in, in finite time
The second secon	
3.	Bound maiting => there is a limit to of number of
	process to get in critical section.
	When limit is reached system must allow request to
	() () () ()

process to get into critical section.

4965009



Ans-4 15 45 75 45 95 14 2/4 3/4 1/4 1/3 1/3 3/3 1/2 2/2 1 queue P, P, P, P, P, P2 B2 B2 P2 P3 B3 P4 P4 P5 time 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Process Arrival Burst started Comp. TA WT D 5 5 0 5 P 0 2 3 5 9 6 Pz 3 12 7 2 6 Py 12 (4 8 7 12 15 8 P 11+16+7 12+16 34 Avg 10 TA = 34/ = 6.8

Avg : WT = 19/5 = 3.8

ANS 3	Semaphors		Monitors			
1,	It is an integer value	Z.	It is abst	rack		
2 ·	It indicates number of shared resources		It contains shared vari- ables and set of procedures which operate on them.			
	When a process acces shared resources it we perform mait(). and when it release it performs signal(<u>ull</u>	when any process its required to access shared variables. in monitar, it needs to access it through procedures			
4 ,	Semaphores do not have condition variables		Monitor have condition variables			
Ans-1	s-1 According to optimal non meremptive mode.					
	Sequence will be -	5 Y	, £, X.	Y, Z,X.		
	Y-> Burst Time = 7 -> -= = = 7 -> = = = = = = = = = = = = = = = = = =	. y	(PU Y Z Z	Time 0 1 2		
	WAT	TAT	7	3		
- 5	X -5 1 Y -5 0	5	Z X	5		
	2 -> 5	11	X	6		
The state of the s	Agy 2	5_67	X	7		
	J		X	9		