SARDAR PATEL COLLEGE OF ENGINEERING, BAKROL, ANAND

Subject Name : Operating System & Virtualization

Semester: 4th

Subject Code: 3141601

Branch: I.T.

Assignment - 4

Given Date: 18/03/2020   ***Last Date: 30/03/2020**

1. Explain Deadlock recovery .
2. What are the necessary conditions for deadlock? Explain each one.
3. Explain the safety algorithm & resource request algorithm for Bankers algorithm.
4. Snapshot of the system is as per the below. (A,B,C) are 3 different resources.

Process	Max	Allocation	Available
	A B C	A B C	A B C
P0	0 0 1	0 0 1	1 5 2
P1	1 7 5	1 0 0	
P2	2 3 5	1 3 5	
P3	0 6 5	0 6 3	

   Answer following questions using Bankers algorithm. 1) How many resources are of type (A,B,C) ?
    2) Find the content of Need matrix. 3) Is the system in safe state ?why ?

5. Explain memory partitioning with suitable diagrams.
6. What is paging? What is page table ? Explain the conversion of virtual address to physical address in paging with example.
7. Explain the segmentation.
8. Which 3 are page replacement algorithms? Discuss it in terms of page fault.
9. Explain concept of demand – paging in memory management.

*Note : Consider the last date as final deadline to submit the assignment. After the last date assignment will not be accepted in any case.