

## Assignment 28-12-2020

1)

Consider the following information about resource usage:

	<u>Allocation</u>			<u>Max</u>			<u>Available</u>		
	A	B	C	A	B	C	A	B	C
P <sub>0</sub>	1	2	1	8	5	1	5	0	5
P <sub>1</sub>	1	2	1	1	9	1			
P <sub>2</sub>	1	2	1	2	4	4			
P <sub>3</sub>	1	2	1	3	3	9			
P <sub>4</sub>	1	2	1	4	2	2			

Using the Banker's Algorithm:

- Demonstrate that the system is in a safe state.
- Demonstrate that the system would not be in a safe state if a request for four C resources was granted to P<sub>3</sub>.
- If process P<sub>3</sub> were to request four C resources, as suggested in (ii), the system would not deadlock. Explain.