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| **SARDAR PATEL COLLEGE OF ENGINEERING, BAKROL, ANAND** | |
| **Subject Name : Operating System & Virtualization** | **Semester: 4th** |
| **Subject Code: 3141601** | **Branch: I.T.** |

**Assignment - 3**

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| **Given Date: 18/02/2020** | **\*Last Date: 25/02/2020** |

1. Define the terms. 1) Race Condition 2) Critical Section 3) Mutual Exclusion

4) Monitor 5) Signal.

1. What is Critical Section Problem and list the requirements to solve it. Write Peterson’s Solution for the same.
2. Explain the Semaphores.
3. Explain the Producer- Consumer Problem.Solve it using Semaphores. Write the Pseudocode for the same.
4. Explain the IPC Problem known as Dinning Philosopher Problem.
5. What is Semaphore ? Explain the Readers-Writers Problem using Semaphore.

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