

CSE321: Operating Systems
Make-up Quiz

Name:	ID:	Section:
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Marks: 10

Time: 10 minutes

Instructions: Answer all questions on the space provided below for each.

Question 1: [CO5] Show Peterson's solution for the given scenario. **[Marks 10]**

- There are two processes: P_0 and P_1 .
- Each Statement takes 4 ms to execute.
- Context Switch will occur after 8 ms.
- Critical section contains 2 statements.
- Remainder section contains 4 statements.
- For P_0 : $i=0$ and $j=1$
- For P_1 : $i=1$ and $j=0$
- $turn=0$
- $flag[0] = \text{FALSE}$, $flag[1] = \text{FALSE}$

The structure of process P_i in Peterson's solution:

```
do{
    flag[i] = true;
    turn = j;
    while(flag[j] == true && turn == j){
        //busy wait
    }
    //critical section
    flag[i] = false;
    //remainder section
}while(true);
```