



United International University

Name
(Optional)

ID No.

Section

.....
Invigilator's
Signature with date

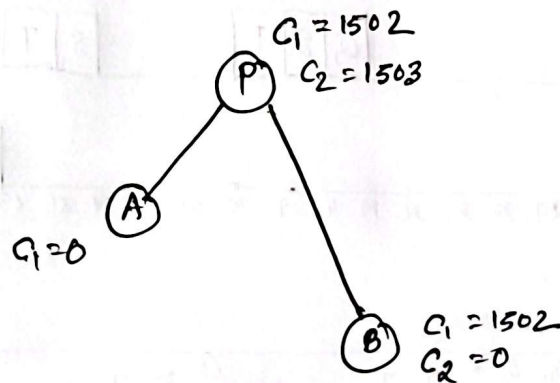
Course Code

Trimester / Semester : Spring / Summer / Fall, 20.....

Name of Exam : Class Test / Mid-term 1 / Mid-term 2 / Final

Date:

2(a)



2(b)

Linux

Linux

Windows

Best of Luck

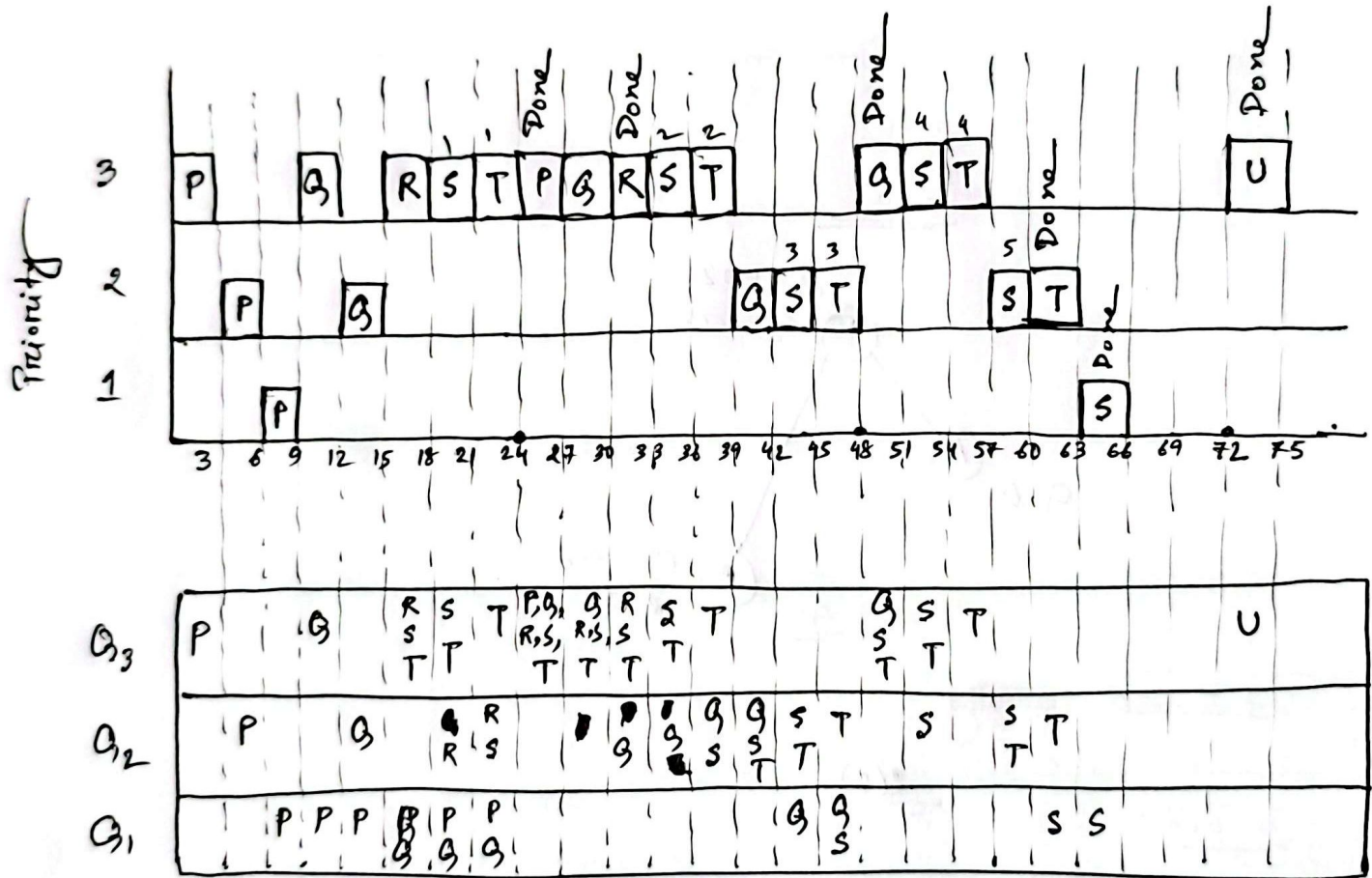
Best of Luck

Linux must be print before
Best of Luck.

3(a) → Starvation, Give the scheduler.

(b) → Priority Boost, decrease priority after each time-slice.

(c) →



$$\text{Average Turnaround time} = \frac{(27-0) + (51-9) + (33-15) + (66-15) + (63-15) + (75-72)}{6}$$

$$= 31.5 \text{ ms}$$

4(a)

Thread 1

```
pending = 1;
countor = 0;
while (pending) {
    printf("Hello\n");
    countor ++;
    if (countor >= 2) {
        pending = 0;
    }
}
```

Thread 2

```
while (pending);
printf("Running Thread 2");
```

4(b)

~~* lock = false initially~~
* lock = false;

Thread 1

```
while(*lock == true);
```

Thread 2

```
while(*lock);
*lock = true;
```

```
*lock = true;
```

5

```
while (true) {  
    lock(m);  
    while (count == 0) {  
        signal(emptyBox);  
        wait(fullBox, m);  
    }  
    getChocolateFromBox();  
    eat();  
    count--;  
    unlock(m);  
}
```