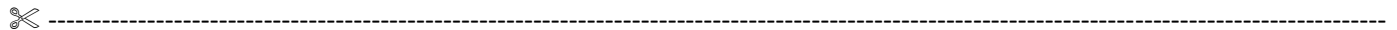


FEUILLE D'EXAMEN



Nom :
Prénom :
N° CIN : :
Epreuve de : Système temps réel
Classe : EQI2.1



Signatures des surveillants	

Identifiant secret
Ne rien écrire ici

Classe : EQI2.1
Enseignant(s) : Ali Hmidene
Durée : 1h 30mn
Nombre totale des pages : . 4 .pages

Note Attribuée

Identifiant secret
Ne rien écrire ici

Problème

Q1. Programme à compléter

```
#include "FreeRTOS.h"

#include "task.h"

#include "semphr.h"

#include "usart.h"

#define AV PORTCbits.RC1

#define AR PORTCbits.RC2

SemaphoreHandle_t SemSynAcq;

.....

unsigned char Val_LDR1 = 0;

unsigned char Val_LDR1 = 0;

void main()

{

    Init();          // Initialisation de la carte

    .....

    SemSynCmd = xSemaphoreCreateBinary();
```

NE RIEN ECRIRE ICI



```
xTaskCreate (.....,"Acq1", 150,NULL, 1, NULL);
xTaskCreate (.....,"Acq2", 150,NULL, 1, NULL);
xTaskCreate (.....,"Cmd", 150,NULL, 1, NULL);
.....
}
void Acquisition1 (void * pdata)
{   for(;;)
    {
        SetChanADC(ADC_CH0);
        ..... // début de conversion
        while(BusyADC());
        .....
        .....
        vTaskDelay(.....);
    }
}
void Acquisition2(void* pdata)
{   for(;;)
    {   xSemaphoreTake( SemSynAcq, (TickType_t) portMAX_DELAY ) ;
```

```
SetChanADC (ADC_CH1);
```

```
.....  
.....  
Val_LDR2 = ReadADC();  
xSemaphoreGive (SemSynCmd);
```

```
}
```

```
}
```

```
void Commande (void* pdata)
```

```
{ for(;;)
```

```
{
```

```
.....  
if (Val_LDR1 > Val_LDR2)
```

```
{
```

```
.....  
.....  
}
```

```
else { if (Val_LDR1 < Val_LDR2)
```

```
{
```

```
.....  
.....  
}
```

```
else
```

```
{
```

```
.....  
.....  
}
```

```
}
```

```
}
```

```
}
```

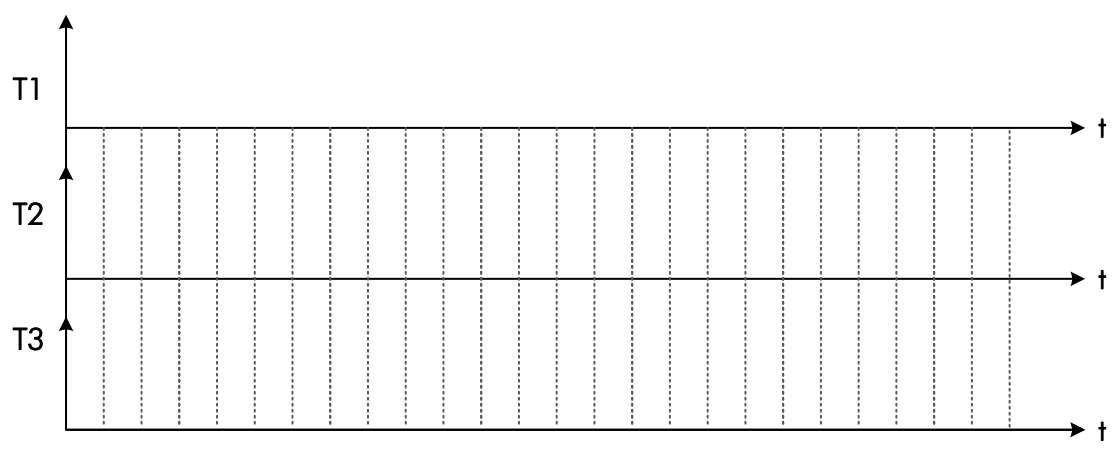
Q2.

Q3.

Exercice

1.
.....
.....

2.
.....



3.
.....

