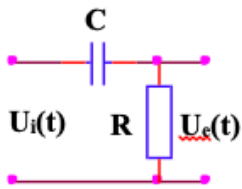


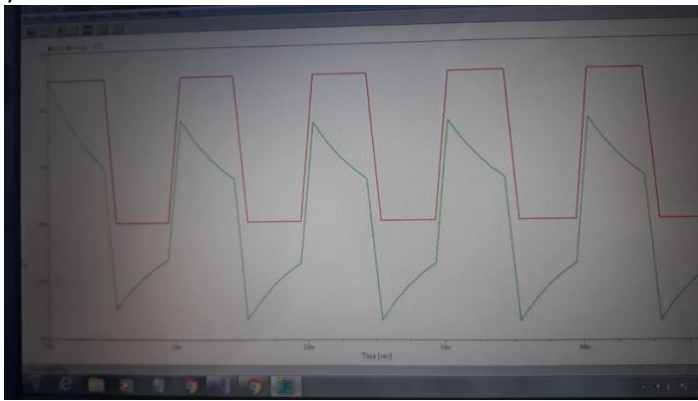
## LABORATORY 1 REPORT



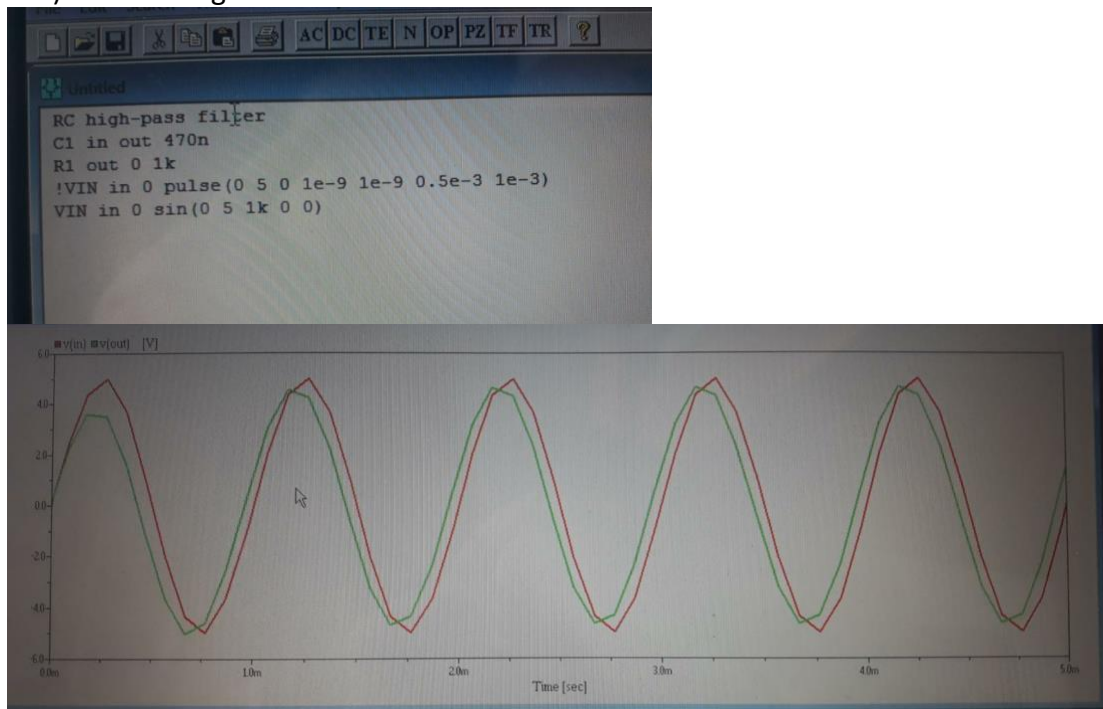
**Fig.1.1**

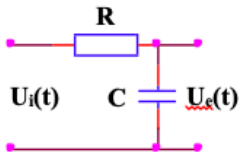
->When we have a RC high-pass filter => high frequency components of a a non-sinusoidal signal on the input appear at the output with a smaller attenuation then low frequency components.

Ex1)



Ex2)The sinus signal





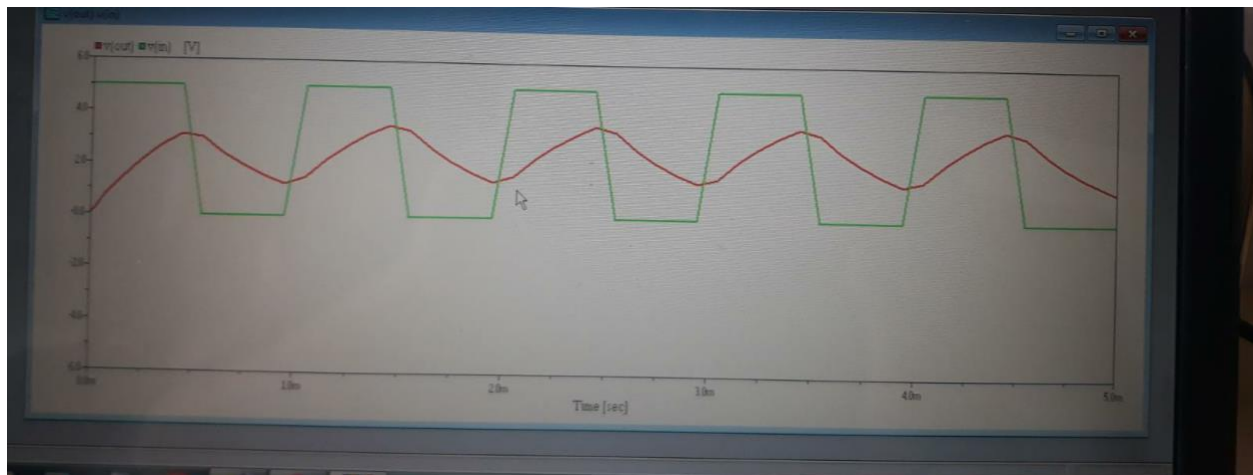
**Fig.1.2**

-> When we have a RC low-pass filter => the low frequency components of a non-sinusoidal signal applied at the input appears at the output with a smaller attenuation than high frequency components.

Ex:

```

RC low-pass filter
C1 out 0 460e-9
R1 in out 1k
VIN in 0 pulse(0 5 0 1e-9 1e-9 0.5e-3 1e-3)
!VIN in 0 sin(0 5 1k 0 0)
  
```



EX : for sinus

```
RC low-pass filter  
C1 out 0 460e-9  
R1 in out 1k  
!VIN in 0 pulse(0 5 0 1e-9 1e-9 0.5e-3 1e-3)  
VIN in 0 sin(0 5 1k 0 0)
```

