



كلية الهندسة بحلوان



## *Electronics and Communication Department*

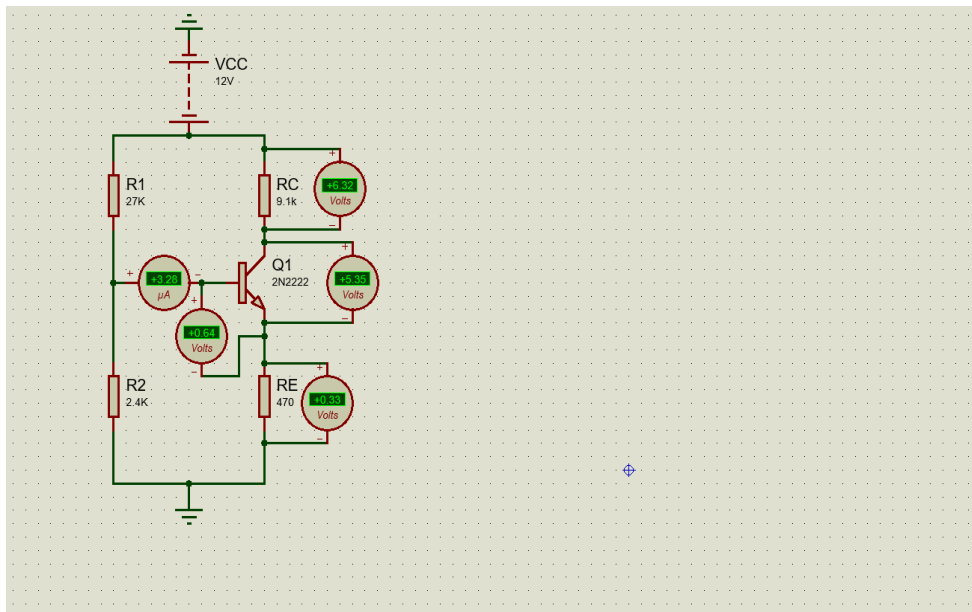
### LAB 1 Notes

### CE AMPLIFIER

Name	عبدالرحمن علي موسى
Sec	4

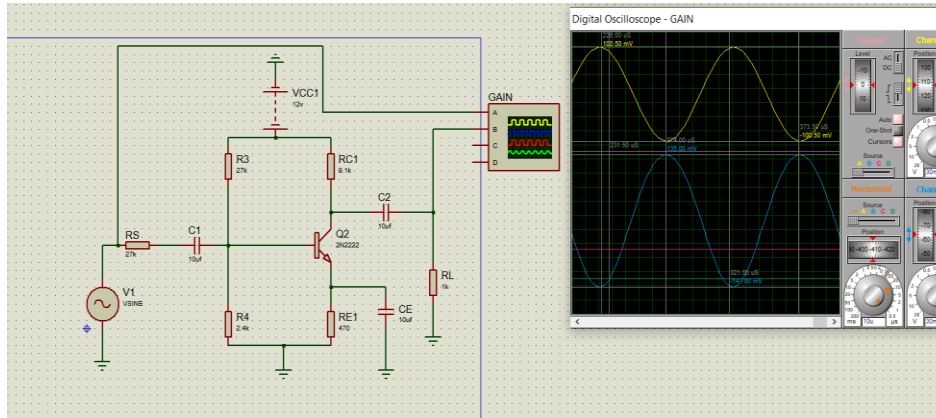
- Dc Measurement

- $V_{CE}=5.35\text{ v}$       $I_C=0.69\text{ mA}$
- $V_{BE}=0.64\text{ v}$       $I_E=0.70\text{ mA}$
- $V_{RC}=6.32\text{ v}$       $I_B=3.28\text{ }\mu\text{A}$
- $V_{RE}=0.33\text{ v}$       $\beta=210.36$
- $\alpha=0.98$



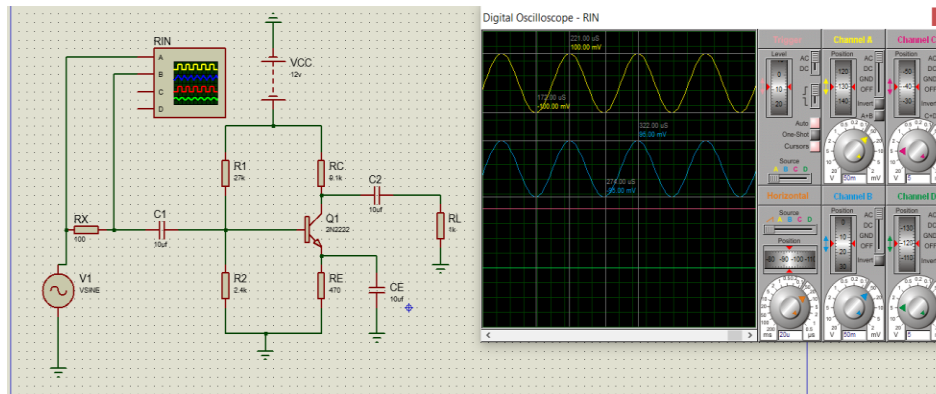
- Gain

- $V_{spp}=200\text{ mV}$      $V_{opp}=282\text{ mV}$
- $A_v=1.41\text{ v/v}$      $A_v\text{ (dB)}=2.98\text{ dB}$



- R<sub>in</sub>

- $V_{xpp}=200\text{ mV}$      $V_{x1pp}=185\text{ mV}$
- $I_{xpp}=0.15\text{ mA}$
- $R_{in}=1.33\text{ K}\Omega$



- Rout

- $V_{xpp}=200\text{ mV}$      $V_{x1pp}=170\text{ mV}$
- $I_{xpp}=0.3\text{ mA}$
- $R_{out}=666.6\ \Omega$

