[Y]=[Y1]+[Y2]=

2/ **Determinate** its hybrid matrix ? [H]=

Farid KADRI Fundamental electronics 1

الاسم:	Exam	(1h:30min)	
اللقب:الفوج:الفوج:	Fundamente	al Electronics 1	
5 <sub>pts</sub> . <u>Exercise 1:</u> Lets consider the opposite circuit:  Select one method to determinate the output voltage?  Choose from: (Superposition, Thevenin, or Milman)			
5 <sub>pts</sub> . <u>Exercise 2:</u> Lets consider the opposite quadrupole circuit:  1/ <u>Determinate</u> the admittance matrix [Y] using <u>parallel</u> association?			

Гiп

2R

R

2R

Vin

5 <sub>pts</sub> . <u>Exercise</u> 3: Lets consider the opposite circular 1/Remove the diode, then <u>determinate</u> the dropping 2/ <u>Determinate</u> the current flowing R <sub>3</sub> , for R <sub>1</sub> =R <sub>2</sub> = R <sub>3</sub> 3/ <u>Determinate</u> the current flowing R <sub>3</sub> , if we reverse the current flowing R <sub>3</sub>	voltage V1?

الاسم:	Vcc.			
اللقب:	∐RЪ ∐ R <sub>C</sub>			
الشعبة:الفوج:الفوج:	C <sub>1</sub> C <sub>2</sub> 1			
5 <sub>pts.</sub> <u>Exercise 4:</u> Lets consider the opposite amplifier circuit:				
$1/\underline{\text{Determinate}}$ the base resistor $\mathbf{R}_b$ to have the operating point $\mathbf{Q}$ at the				
midpoint (middle) of the static charge.  Considering the equivalent AC circuit below:	Ra			
$2/\overline{\text{Find}}$ the voltage gain $G_v$ and the input impedance	Z <sub>in</sub> ?			
	eg Vin RE h11 RC RL			
	1			
