ECE 3337 – Lab Report 1

BJT Amplifiers – Arnav Goyal – 251244778

Prelab

Only final results for each question are shown here, complete work can be found at the end of this report.

Common-Emitter Amplifier

1.1

N/A

1.2 DC Biasing the CE Amplifier as noted in the question gives the following resistor values

Resistor	Expression	Numerical Value $[\Omega]$	Std Lab Value [Ω]
R_{1}	$\frac{{V}_{cc}\!-\!{V}_{B}}{10\!\cdot\! i_{B}}$	33.200 k	33.000 k
R_2	$rac{{V_{\scriptscriptstyle B}}}{10 \cdot i_{\scriptscriptstyle B}}$	6.800 k	6.800 k
R_C	$\frac{{V_{cc}} - {V_C}}{i_C}$	800	820
R_E	$rac{{V}_E}{i_E}$	199	200