

برگه یادداشت آزمایش دوم-جلسه اول

برای مدار CE بهتر است جریان کم باشد یا زیاد؟ چرا؟

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.....
.....

$Gain-Bandwidth =$

$I_{max} =$

$V_{CE\ max} =$

$I_e =$

$V_{Collector-Emitter} =$

$\rightarrow g_m =$

=فرکانس کاری

$Gain_{max @ f} =$

$Gain_{انتخابی} =$

$\rightarrow R_L =$

$\rightarrow R_E =$

$\rightarrow V_{Base} =$

$\rightarrow R_{B1} =$

$\rightarrow R_{B2} =$

$\rightarrow C_{in} =$

Amplifier-Stability parameters:

$$K = \frac{1 - |S_{11}|^2 - |S_{22}|^2 + |\Delta|^2}{2|S_{12}S_{21}|} =$$

$$\Delta = |S_{11}S_{22} - S_{12}S_{21}| =$$

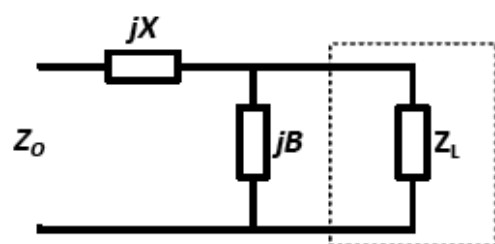
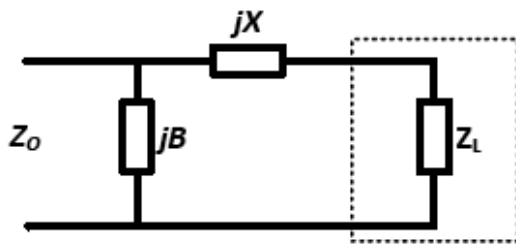
$$C_L = \frac{(S_{22} - \Delta S_{11}^*)^*}{|S_{22}|^2 - |\Delta|^2} =$$

$$R_L = \left| \frac{S_{12}S_{21}}{|S_{22}|^2 - |\Delta|^2} \right| =$$

$$C_S = \frac{(S_{11} - \Delta S_{22}^*)^*}{|S_{11}|^2 - |\Delta|^2} =$$

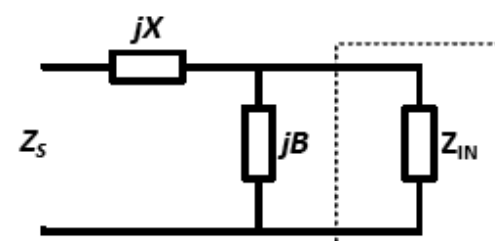
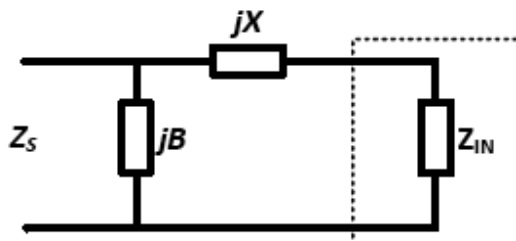
$$R_S = \left| \frac{S_{12}S_{21}}{|S_{11}|^2 - |\Delta|^2} \right| =$$

Show your chosen Γ_S and Γ_L on a Smith chart and design the impedance matching circuits (include the Smith chart in your report).



$$X = \quad \quad \quad L \text{ or } C =$$

$$B = \quad \quad \quad L \text{ or } C =$$



$X =$

$L \text{ or } C =$

$B =$

$L \text{ or } C =$