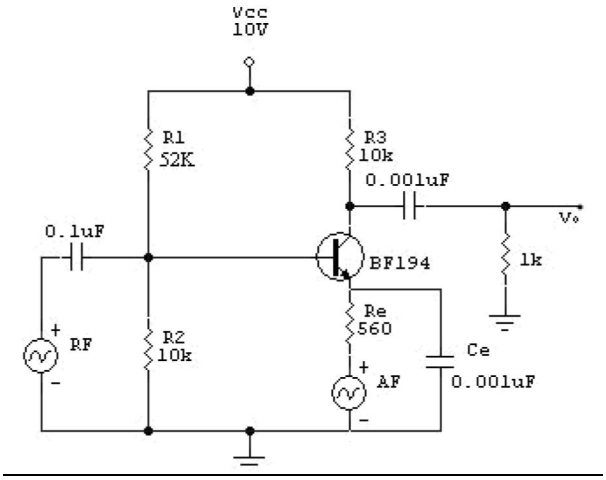

Take V_{CC} = +15 V, I_C =1 mA, ß=100.

Therefore I_B = 10 µA, V_{CE} = 40% of V_{CC} = 6 V, V_{RE} = 10% of V_{CC} = 1.5 V.

$R_E = (V_{RE} \div I_C) = 1.5\ k\Omega$ since $I_E \sim I_C$.

$V_{R2} = (V_{RE} + V_{BE}) = 1.5+0.7 = 2.2V$.

$V_{R1} = (V_{CC} - V_{R2}) = 15 - 2.2 = 12.8V$.

From circuit diagram, we have

$V_{R1} = 10I_B * R_1$ & $V_{R2} = 9I_B * R2$

$\Rightarrow R_1 = 12.8 \div (10 * 10 * 10^{-5}) = 51.62\ k\Omega$.

$\Rightarrow R_2 = 2.2 \div (9 * 10 * 10^{-5}) = 10\ k\Omega$.

Design of Capacitors:

$X_{C1} \leq Rin/10$, $Rin = R1 \| R2 \| (1+h_{fe}*r_e) = 91.4$

$X_{C1} \leq 91.4$, $C1 \geq 0.34$ use 0.22µF

$X_{CE} \leq R_E/10 = 9.15$

$C_E \geq 0.02\ \mu F$

Design of C_{C1}, C_{C2}:

$X_C \leq Rin/10$

$Rin = R1 \| R2 \| (1+h_{fe}*r_e)$

$Xc \leq 0.123K$

$Cc \geq 1/(2\pi f*(0.12*10^3))$

$Cc \geq 0.133*10^{-6}$

Use 0.1 µF