7.6.(1). $\dot{A} = \frac{R+R_f+R_W}{R}$ 要求 3

$R_f + R_W > 2R$.

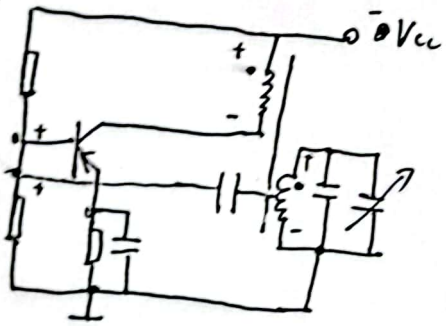
$R_W > 2k\Omega$.

(2). $f_{o\,max} = \frac{1}{2\pi R_1 C} \approx 1.59\,kHz$

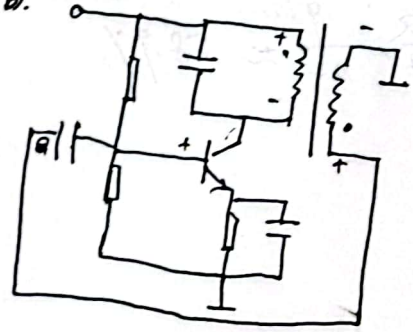
$f_{o\,min} = \frac{1}{2\pi(R_1+R_2)C} \approx 144.69\,Hz$.

7.9.

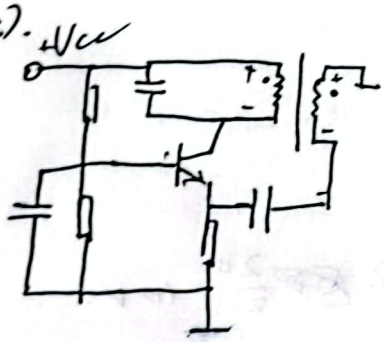
(a).

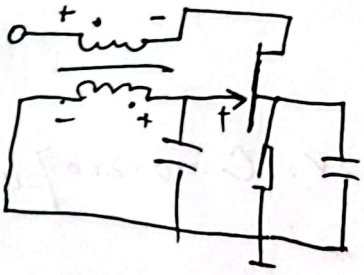


(b). +Vcc



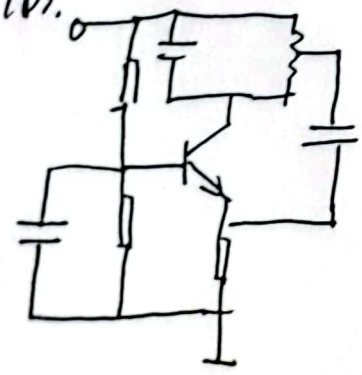
(c). -Vcc



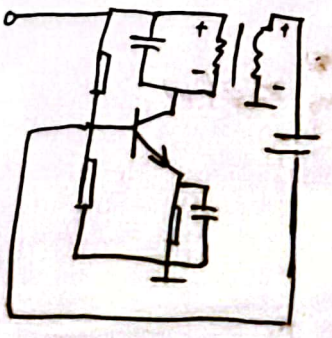


7.11.

(b).



(c).



8.2. (1). C.

(2). B.

(3). C.

(4). C

(5). A

8.12

(1). $U_E = \frac{V_{CC}}{2} = 12V$.

若不合适，则可调节 R_2 与 R_3 的比值.

(2).

$U_{om} = \frac{(V_{CC}/2) - U_{CES}}{\sqrt{2}} = \frac{9}{\sqrt{2}} V$.

$P_{om} = \frac{(U_{om})^2}{R_L} \approx 5.06W$.

$\eta = \frac{\pi}{4} \cdot \frac{\frac{V_{CC}}{2} - U_{CES}}{\frac{V_{CC}}{2}} = \frac{\pi}{4} \times \frac{9}{12} \approx 58.9\%$

(3). $I_{cm} > \frac{\frac{V_{CC}}{2}}{R_L} = 1.5A$

$U_{(BR)CEO} > V_{CC} = 24V$.

$P_{cm} > \frac{(\frac{V_{CC}}{2})^2}{\pi^2 R_L} \approx 1.82W$.

8.13.

(1). A: $U = 0.7V$. B: $U = 10 - 0.7 = 9.3V$. C: $10 + 2\times 0.7 = 11.4V$. D: $\frac{20}{2} = 10V$.

(2). ~~$P_{om} = \left(\frac{V_{CC}}{2} - U_{CES}\right)$~~

$U_{om} = \frac{\frac{V_{CC}}{2} - U_{CES}}{\sqrt{2}}$.

$P_{om} = \frac{U_{om}^2}{R_L} \geq 1.5W \rightarrow U_{om} \geq 24W$.

$\rightarrow V_{CC} \geq 19.86V$.