

自动控制原理考试样卷 A 答案

1. 答:
$$\frac{CLR_2s^2}{(CLR_1 + CLR_2)s^2 + (CR_1R_2 + L)s + R_1}$$
2. 答: $\xi \geq 0.456$, $\xi\omega_n \geq 30$, $T=0.016s$, $K=60>50$,
3. 答: $K=10$, $\tau=0.2$
4. 答: $1 + \frac{\tau s}{s^2 + s + 1}$
5. 答: (1) 选(A) $\varphi_c = 45.54^\circ$ (2)选(C); 是校正前的 1/5
6. 答: (1) $\&= -\frac{kM}{\alpha + 4}$ $e>0$; $\&= \frac{kM}{\alpha + 4}$ $e<0$; (2) $T=0.443$; $k=15.54$
7. 答:
$$D(z) = \frac{0.543(1 - 0.5z^{-1})(1 - 0.368z^{-1})}{(1 - z^{-1})(1 - 0.718z^{-1})}$$