

l.d)

$$\lim_{\lambda \rightarrow \infty} \frac{\lambda^k e^{-\lambda}}{k!} = \frac{k}{k!} \frac{\lambda}{e^{\lambda}} = \frac{\lambda}{\infty}$$

$$\text{L'H. } \frac{1}{e^{\lambda}} = \boxed{0}$$

$$\lim_{\lambda \rightarrow 0} \frac{\lambda^k e^{-\lambda}}{k!} = \frac{0(k)(1)}{k!} = \boxed{0}$$