$$u^*(t) = -1, \qquad t \in [t_0, t_f], c \geq 1$$

$$u^*(t) = \begin{cases} 0, & t \in [t_0, t_1) \\ -1, & t \in [t_1, t_f], \end{cases} \quad 0 < c < 1$$

$$u^*(t) = \begin{cases} 0, & t \in [t_0, t_2) \\ 1, & t \in [t_2, t_f] \end{cases} \quad -1 < c < 0$$

$$u^*(t) = 1, \qquad t \in [t_0, t_f], c \leq -1$$

$$u^*(t) = 0, \qquad t \in [t_0, t_f], c = 0$$

$$u^*(t) = -1, \qquad t \in [t_0, t_f], \ c \geq 1$$

$$u^*(t) = \begin{cases} 0, & t \in [t_0, t_1) \\ -1, & t \in [t_1, t_f], \end{cases} \quad 0 < c < 1$$

$$u^*(t) = \begin{cases} 0, & t \in [t_0, t_2) \\ 1, & t \in [t_2, t_f] \end{cases} \quad -1 < c < 0$$

$$u^*(t) = 1, \qquad t \in [t_0, t_f], \ c \leq -1$$

$$u^*(t) = 0, \qquad t \in [t_0, t_f], \ c = 0$$