

System Simulation Final Exam:

$$\textcircled{1} \quad \frac{1}{s^2} \Rightarrow \frac{T^2 z}{z^2 + 2z + 1} = \frac{Y(z)}{X(z)}$$

$$X(z)(T^2 z) = Y(z)(z^2 + 2z + 1) \rightarrow T^2 x[k-1] = y[k-2] + 2y[k-1] + y[k]$$

$$y[k] = T^2 x[k-1] - y[k-2] - 2y[k-1]$$

- $\textcircled{5}$ D) The best representation of the Beast's and Belle's love story is Part C. This was the only sim. that showed Belle developing positive feelings for the Beast.