$$x_1 \sim \mathcal{N}\left(\mu, v^2\right) \tag{13a}$$

$$x_t = \frac{x_{t-1}}{2} + 25\frac{x_{t-1}}{1 + x_{t-1}^2} + 8\cos\left(1.2t\right)\delta_{t-1} \tag{13b}$$

$$y_t = \frac{x_t^2}{20} + \varepsilon_t \tag{13c}$$

where $\delta_{t-1} \sim \mathcal{N}\left(0, \omega^2\right)$ and $\varepsilon_t \sim \mathcal{N}\left(0, \sigma^2\right)$. We set the parameters as $\mu = 0$, $v = \sqrt{5}$, $\omega = \sqrt{10}$ and $\sigma = \sqrt{10}$.