(B)

Regime 1:

$$\eta(t+1) = 0.27 \times \eta(t) + w_1(t)$$

Regime 2:

$$\eta(t+1) = 0.47 \times \eta(t) + w_1(t)$$

Measurement Model

Regime 1:

$$iEMG = 0 \times SelfReport + 4.55 + \eta$$

Regime 2:

 $iEMG = 0.46 \times SelfReport + 4.75 + \eta$