

2016

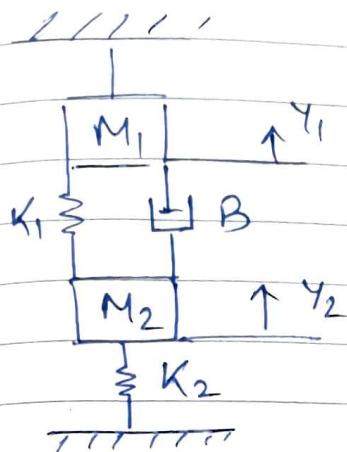
Appointment / Meeting

DECEMBER

357-009 • wk. 52

22

THURSDAY

WEEK-1 / QUESTION - 2Ordinary Differential Equations.for M_1

$$\Rightarrow M_1 \frac{d^2 y_1}{dt^2} + B \frac{d(y_1 - y_2)}{dt} + K_1 (y_1 - y_2) = 0$$

for M_2

$$\Rightarrow M_2 \frac{d^2 y_2}{dt^2} + B \frac{d}{dt} (y_2 - y_1) + K_1 (y_2 - y_1) + K_2 y_2 = F(t)$$

$$(1) \cancel{M_1} M_1 \ddot{y}_1 = -B(\dot{y}_1 - \dot{y}_2) - K_1 (y_1 - y_2)$$

$$(2) M_2 \ddot{y}_2 = F(t) - B(\dot{y}_2 - \dot{y}_1) - K_1 (y_2 - y_1) - K_2 y_2$$