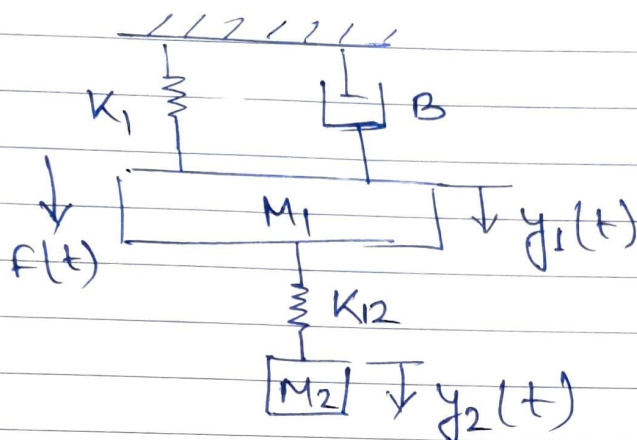## Week - 1 / Question - 1

09.00

Ordinary Differential Equations :-

$$M_1 \frac{d^2 y_1}{dt^2} + B \frac{dy_1}{dt} + K_1 y_1 + K_{12}(y_1 - y_2) = f(t)$$

$$\Rightarrow M_1 \frac{d^2 y_1}{dt^2} = f(t) - B \frac{dy_1}{dt} - K_1 y_1 - K_{12}(y_1 - y_2) \qquad \boxed{1}$$

$$M_2 \frac{d^2 y_2}{dt^2} + K_{12}(y_2 - y_1) = 0$$

$$\Rightarrow M_2 \frac{d^2 y_2}{dt^2} = + K_{12} y_1 - K_{12} y_2 \qquad \boxed{2}$$

$$= - K_{12}(y_2 - y_1)$$

2016
DEC

1 2 3 | 4 5 6 7 8 9 10 | 11 12 13 14 15 16 17 | 18 19 20 21 22 23 24 25 26 27 28 29 30 31
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