

GATE-2023 (EE)

Q 29

MANOJ KUMAR (EE23BTECH11211)

Q29: The value of parameters of the circuit shown in the figure are

$$R_1 = 2\Omega, R_2 = 2\Omega, R_3 = 3\Omega, L = 10\text{mH}, C = 100\mu\text{F}$$

For time $t < 0$, the circuit is at steady state with the switch ' K ' in closed condition. If the switch is opened at $t = 0$, the value of the voltage across the inductor (V_L) at $t = 0^+$ in Volts is _____ (Round off to 1 decimal place).

