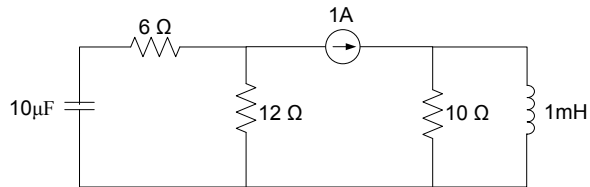


TOPIC

Electricity and Magnetism – Section XI – Question 13

QUESTION

The circuit below has been in the state for a long period. The energy stored in μJoules on the capacitor and inductor, respectively most nearly is



- (A) 0, 0
- (B) 5, 500
- (C) 720, 500
- (D) -720, 500

HINT

$$E_L = \frac{1}{2} L \cdot i_L^2 \text{ (The current through the inductor is required)}$$

$$E_C = \frac{1}{2} C V_C^2 \text{ (The voltage drop across the capacitor is required)}$$

For DC Signals: A capacitor is open circuit and an inductor is a short circuit.

CONTRIBUTOR

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