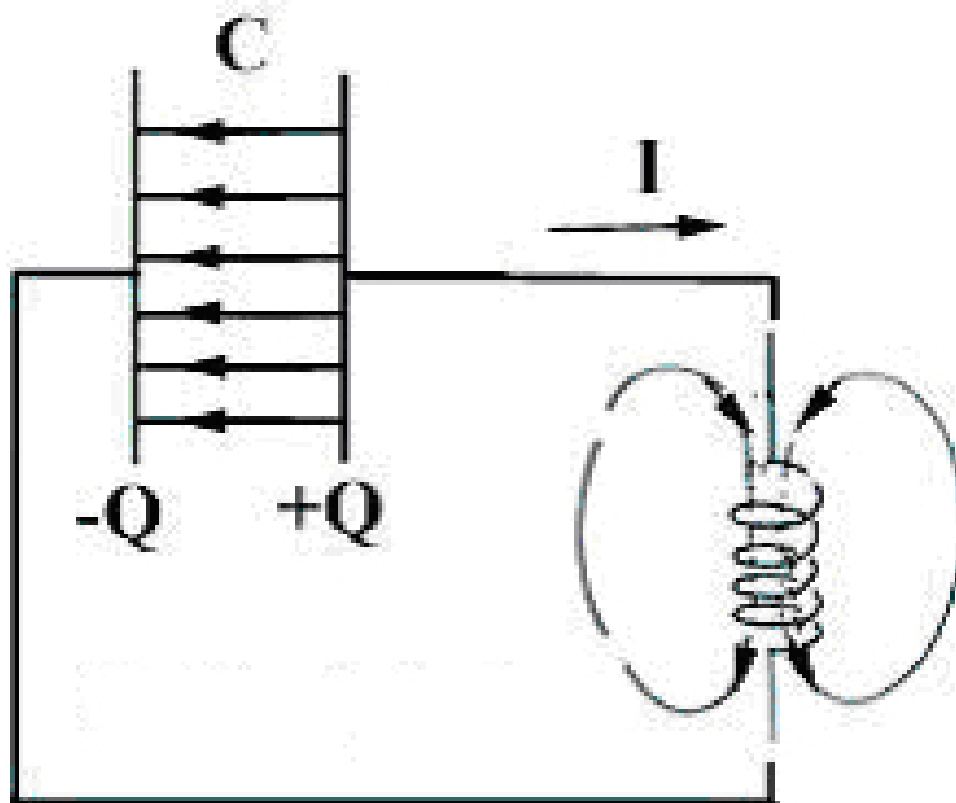


Consider the above LC circuit. At the time shown the current has its maximum value. At this time

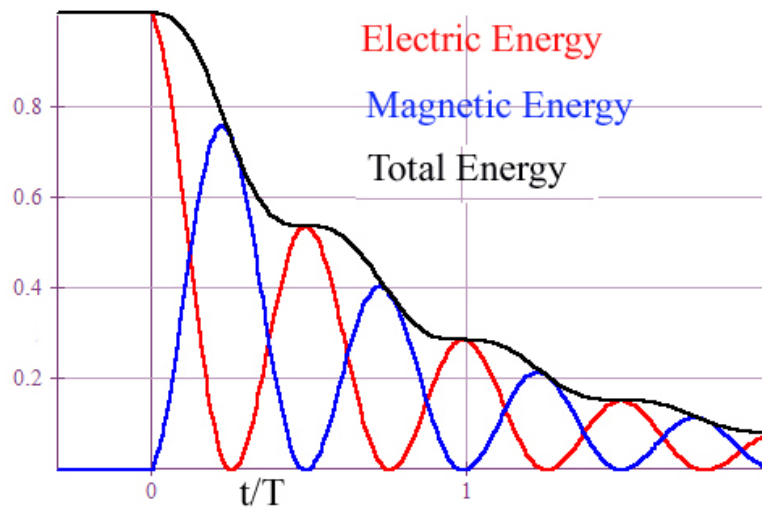
- 1. The charge on the capacitor has its maximum value**
- 2. The magnetic field is zero**
- 3. The electric field has its maximum value**
- 4. The charge on the capacitor is zero**
- 5. Don't have a clue**



In the above LC circuit the current is in the direction shown and the charges on the capacitor have the signs shown.

At this time,

- 1. I is increasing and Q is increasing**
- 2. I is increasing and Q is decreasing**
- 3. I is decreasing and Q is increasing**
- 4. I is decreasing and Q is decreasing**
- 5. Don't have a clue**



At $t = 0$, a fully charged capacitor begins discharging through an inductor and a resistor. The plot shows the time behavior of the electric and magnetic energies in the circuit, and their sum. The total energy in the circuit decreases most rapidly when

- 1. The absolute value of the current is a maximum**
- 2. The current is zero**
- 3. Neither, since the current decreases at an exponential rate.**
- 4. Don't have a clue**