

1. What is the period of an LC circuit with inductance L and capacitance C ?

- A) $2\pi\sqrt{LC}$
- B) $4\pi\sqrt{LC}$
- C) $2\pi/\sqrt{LC}$
- D) $4\pi/\sqrt{LC}$
- E) $2\sqrt{LC}$

2. What is the angular frequency of an LC circuit?

- A) \sqrt{LC}
- B) $1/\sqrt{LC}$
- C) $2\pi\sqrt{LC}$
- D) $1/2\pi\sqrt{LC}$
- E) $2\pi/\sqrt{LC}$

3. The function for current in an LC circuit best resembles a

- A) parabolic function
- B) hyperbolic function
- C) sine function
- D) exponential function
- E) linear function

4. As $t \rightarrow \infty$, the total energy in an LC circuit

- A) decreases exponentially
- B) decreases at a constant rate
- C) remains constant
- D) increases at a constant rate
- E) increases exponentially

5. In LC circuits which of the following act like short circuits?

- I. Capacitors initially
- II. Inductors initially
- III. Capacitors at equilibrium
- IV. Inductors at equilibrium

- A) I only
- B) II only
- C) I and III only
- D) I and IV only
- E) II and III only

6. In LC circuits which of the following act like open circuits?

- I. Capacitors initially
- II. Inductors initially
- III. Capacitors at equilibrium
- IV. Inductors at equilibrium

- A) I only
- B) II only
- C) I and IV only
- D) II and III only
- E) II and IV only

7. Which of the following is equivalent to a $V \cdot s/A$?

- A) Ohm
- B) Henry
- C) Weber
- D) Tesla
- E) Farad

Answer Key
RL Circuits MC Questions [Mar 28, 2011]

1. A
 2. B
 3. C
 4. C
 5. D
 6. D
 7. B
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Name _____

Class _____

Date _____

1. _____

2. _____

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4. _____

5. _____

6. _____

7. _____