Chapter 2

- 1. What is Ohm's law and how can it be used to determine resistance?
- 2. What is a voltage drop in a circuit and what causes it?
- 3. State Kirchhoff's voltage law and illustrate it with your own example.
- 4. What is a "short circuit" and why is it bad.
- 5. Define "open" as it pertains to an electric circuit.

Chapter 4

- 6. Define reluctance, magnetic flux, and magnetomotive force and describe the relationship between them.
- 7. What are the defining characteristics of inductance?
- 8. State and explain Lenz's law.
- 9. State and explain Faraday's law.
- 10. Sketch the current and voltage waves for a capacitor connected to a sinusoidal source.

Chapter 5

- 1. What are the defining characteristics of capacitance?
- 2. What factors determine the capacitance of a parallel plate capacitor?
- 3. What is the recommended safe procedure for discharging a large capacitor?
- 4. What is meant by the time constant of an electric circuit?
- 5. Sketch the current and voltage waves for a capacitor connected to a sinusoidal source.