

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Technician A says that magnets are used in some crankshaft position sensors. Technician B says magnets are used in potentiometers. Which technician is correct? 1) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
  
- 2) Two technicians are discussing electromagnetic induction. Technician A says that the induced voltage can be increased if the speed is increased between the conductor and the magnetic lines of force. Technician B says that the induced voltage can be increased by increasing the strength of the magnetic field. Which technician is correct? 2) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
  
- 3) Magnetic lines of flux flow very easily through objects with high reluctance. 3) \_\_\_\_\_
  - A) True
  - B) False
  
- 4) How can the electromagnetic strength of an energized coil of wire be increased? 4) \_\_\_\_\_
  - A) Place an iron core in the middle of the coil
  - B) Increase current flow through the coil
  - C) Increase the number of turns in the coiled wire
  - D) Any of these
  
- 5) Technician A says that objects with high permeability allow magnetic lines of flux to flow easily through their material. Technician B says that some objects are good insulators that will not allow magnetic lines of flux to flow through their material. Which technician is correct? 5) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
  
- 6) Magnetic field strength is measured in \_\_\_\_\_. 6) \_\_\_\_\_
  - A) ampere-turns
  - B) flux
  - C) density
  - D) coil strength

- 7) Electromagnetic interference can be reduced by using a \_\_\_\_\_. 7) \_\_\_\_\_
- A) resistance
  - B) capacitor
  - C) coil
  - D) Any of the above
- 8) An ignition coil operates using the principle of \_\_\_\_\_. 8) \_\_\_\_\_
- A) electromagnetic induction
  - B) self-induction
  - C) mutual induction
  - D) All of the above
- 9) Technician A says that a relay is an electromagnetic switch. Technician B says that a solenoid uses a movable core. Which technician is correct? 9) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 10) Which term describes current flow produced in a complete circuit when a magnetic field is moved back and forth across the circuit path? 10) \_\_\_\_\_
- A) Magnetic induction
  - B) Electromagnetic reluctance
  - C) Magnetic potential
  - D) None of these

## Answer Key

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- 1) A  
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- 2) C  
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- 3) B  
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- 4) D  
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- 5) A  
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- 6) A  
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- 7) D  
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- 8) D  
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- 9) C  
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- 10) A  
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