

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