

Name \_\_\_\_\_

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

- 1) Technician A says that the primary and secondary ignition systems are never connected. 1) \_\_\_\_\_  
Technician B says that the primary and secondary windings are connected in some ignition coils.  
Which technician is correct?  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 2) The ignition system pickup coil or trigger is usually electrically connected to the \_\_\_\_\_. 2) \_\_\_\_\_  
A) ignition module  
B) ignition coil  
C) distributor cap  
D) rotor
- 3) Which statement below is correct? 3) \_\_\_\_\_  
A) The primary coil windings are designed for higher current (2-6 Amperes).  
B) The secondary coil windings are designed for higher current (2-6 Amperes).  
C) The primary coil windings are made of thinner wire than the secondary windings.  
D) The primary coil windings have more turns of wire than the secondary windings.
- 4) An ion-sensing ignition system allow the ignition system itself to be able to \_\_\_\_\_. 4) \_\_\_\_\_  
A) detect misfire  
B) detect spark knock  
C) detect rich or lean air-fuel mixture  
D) all of the above
- 5) Which statement below is correct? 5) \_\_\_\_\_  
A) Coil on plug systems use one ignition coil per cylinder.  
B) All coil on plug systems require ignition wires.  
C) Ignition control circuits cannot sense the voltage required to fire a spark plug.  
D) It is not possible to control the ignition timing for each cylinder separately.
- 6) The primary (low-voltage) ignition system must be working correctly before any spark occurs 6) \_\_\_\_\_  
from a coil. Which component is NOT in the primary ignition circuit?  
A) Spark plug wires  
B) Ignition module  
C) Pick up coil  
D) Ignition switch

- 7) Technician A says that a waste spark ignition system fires two spark plugs at the same time. Technician B says that the waste spark ignition system uses ignition coils connected to companion cylinders. Which technician is correct? 7) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 8) A waste-spark-type ignition system \_\_\_\_\_. 8) \_\_\_\_\_
- A) fires two spark plugs at the same time
  - B) fires one spark plug with reverse polarity
  - C) fires one spark plug with straight polarity
  - D) all of the above
- 9) Because of \_\_\_\_\_, an ignition coil cannot be fully charged (reach magnetic saturation) until after a delay of about 10 milliseconds. 9) \_\_\_\_\_
- A) voltage drop across the ignition switch and related wiring
  - B) resistance in the coil windings
  - C) inductive reactance
  - D) saturation
- 10) Which statement below is correct? 10) \_\_\_\_\_
- A) Most ignition systems work by switching the negative side of the coil primary windings to ground.
  - B) Most ignition systems work by switching the positive side of the coil windings to power.
  - C) Most ignition systems work by switching the circuit grounding the ignition coil's secondary windings.
  - D) Most ignition systems work by switching the circuit to power the ignition coil's secondary windings.