

Name _____

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

- 1) Which switching device used below is also called a "magnetic pulse generator"? 1) _____
 - A) Pickup coil
 - B) Hall-effect switch
 - C) Optical sensor
 - D) Ignition coil

- 2) The ignition module has direct control over the firing of the coil(s) of an EI system. Which component(s) triggers (controls) the module? 2) _____
 - A) Pickup coil
 - B) Computer
 - C) Crankshaft sensor
 - D) All of the above

- 3) Technician A says that ignition timing cannot be adjusted on waste spark ignition systems. Technician B says that most waste spark systems use a crankshaft position sensor. Which technician is correct? 3) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 4) Which statement below is correct? 4) _____
 - 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

- 5) Technician A looks for engine speed (RPM) when cranking an engine that will not start. Technician B says that a problem in the primary circuit could make the tachometer not work. Which technician is correct? 5) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 6) Ignition control (IC) is the term used to describe the PCM produced signal that controls ignition timing. This signal may also be called any of these, EXCEPT _____. 6) _____
 - A) DIS
 - B) EST
 - C) SPOUT
 - D) IC

- 7) The following statements are all correct EXCEPT _____. 7) _____
- A) Knock sensors require voltage input from the PCM to function properly
 - B) Ignition timing may be either at TDC or BTDC
 - C) When the PCM detects detonation using the knock sensor, it will retard ignition timing
 - D) When replacing a spark plug, consider reach, heat range, and seat type
- 8) Waste spark ignition systems are being discussed. Technician A says that it requires more voltage to fire the compression cylinder than the companion cylinder. Technician B says that waste spark systems using compression sensing electronics do not require a camshaft sensor for engine position. Which technician is correct? 8) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 9) Which switching device uses LEDs? 9) _____
- A) Optical sensor
 - B) Pickup coil
 - C) Hall effect
 - D) Magnetic retractor
- 10) The primary (low-voltage) ignition system must be working correctly before any spark occurs from a coil. Which component is NOT in the primary ignition circuit? 10) _____
- A) Spark plug wiring
 - B) Ignition module (igniter)
 - C) Pick up coil (pulse generator)
 - D) Ignition switch

Answer Key

Testname: ENGINEPERF5_16B

- 1) A
Page Ref: 263
- 2) D
Page Ref: 263
- 3) C
Page Ref: 226, 276
- 4) A
Page Ref: 262
- 5) C
Page Ref: 267
- 6) A
Page Ref: 273
- 7) A
Page Ref: 276-278
- 8) C
Page Ref: 271-272
- 9) A
Page Ref: 266
- 10) A
Page Ref: 262