

Name _____

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

- 1) The ignition module has direct control over the firing of the coil(s) of an EI system. Which component(s) triggers (controls) the module? 1) _____
 - A) Pickup coil
 - B) Computer
 - C) Crankshaft sensor
 - D) Either A or C

- 2) How does a waste-spark ignition system fire the spark plugs? 2) _____
 - A) The polarity reverses at each firing (flip flops)
 - B) The same plug always is fired straight or reverse polarity
 - C) The waste spark is sent to the cylinder next to the cylinder being fired
 - D) Both A and C

- 3) Which switching device uses a shutter blade and sensor to detect a magnetic field? 3) _____
 - A) Hall-effect switch
 - B) Pickup coil
 - C) Optical sensor
 - D) Ignition coil

- 4) A COP ignition system can be called _____. 4) _____
 - A) coil-by-plug
 - B) coil-near-plug
 - C) coil-over-plug
 - D) Any of the above

- 5) What is the principle used to create high voltage from low voltage? 5) _____
 - A) Mutual induction
 - B) Electromagnetic multiplication
 - C) Electromechanic induction
 - D) Electromagnetic magnification

- 6) HEI and EIS are examples of _____. 6) _____
 - A) waste-spark systems
 - B) coil-on-plug systems
 - C) distributor ignition systems
 - D) pickup coil types

- 7) An ion-sensing ignition system allow the ignition system itself to be able to _____. 7) _____
 - A) detect misfire
 - B) detect spark knock
 - C) detect rich or lean air-fuel mixture
 - D) All of the above

- 8) 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? 8) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians A and B
 - D) Neither technician A nor B
- 9) The pulse generator _____. 9) _____
- A) fires the spark plug directly
 - B) signals the electronic control unit (module)
 - C) signals the computer that fires the spark plug directly
 - D) is used as a tachometer reference signal by the computer and has no other function
- 10) Which switching device creates its own electrical voltage pulse? 10) _____
- A) Magnetic sensor
 - B) Hall-effect switch
 - C) Optical sensor
 - D) Ignition coil

Answer Key

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1) D

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2) B

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3) A

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4) D

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5) A

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6) C

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7) D

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8) C

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9) B

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10) A

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