

Name \_\_\_\_\_

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

- 1) Which GDI mode of operation results in a richer air–fuel mixture near the spark plug? 1) \_\_\_\_\_
  - A) Stoichiometric
  - B) Homogeneous
  - C) Stratified
  - D) Knock protection
  
- 2) The GDI injector is held open with 50 to 90 volts. 2) \_\_\_\_\_
  - A) True
  - B) False
  
- 3) What GDI operating mode is used to burn sulfur from the NO<sub>x</sub> catalyst? 3) \_\_\_\_\_
  - A) Stratified mode
  - B) Homogeneous stratified mode
  - C) Stratified heating mode
  - D) None of these
  
- 4) A characteristic of GDI systems that could cause a customer concern is \_\_\_\_\_. 4) \_\_\_\_\_
  - A) The high fuel pressure causes the injectors to be noisy
  - B) A slight fuel smell when idling
  - C) Harder to start when cold
  - D) GDI engines have noisy valves
  
- 5) Technician A says that the cylinder head and piston design of a GDI engine is the same as in a port injected engine. Technician B says that a GDI engine uses specially shaped pistons. Which technician is correct? 5) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
  
- 6) The high pressure fuel pumps used in gasoline direct injection (GDI) systems are powered by \_\_\_\_\_. 6) \_\_\_\_\_
  - A) Electricity (DC motor)
  - B) Electricity (AC motor)
  - C) The camshaft
  - D) The crankshaft
  
- 7) When the fuel pressure regulator is deactivated, the fuel pressure defaults to \_\_\_\_\_. 7) \_\_\_\_\_
  - A) High pressure mode
  - B) Low pressure mode
  - C) Acceleration mode
  - D) 60 PSI

- 8) Some engines that use a gasoline direct injection system also have port injection. 8) \_\_\_\_\_  
A) True  
B) False
- 9) Some GDI engines exhibit carbon build-up in the engine. Where do these carbon deposits accumulate? 9) \_\_\_\_\_  
A) In the exhaust system  
B) On the back of the intake valve  
C) At the throttle valve  
D) In the intake manifold
- 10) The fuel pump inside the fuel tank on a vehicle equipped with gasoline direct injection produces about what fuel pressure? 10) \_\_\_\_\_  
A) 5 to 10 PSI  
B) 10 to 20 PSI  
C) 20 to 40 PSI  
D) 50 to 60 PSI

## Answer Key

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