Automotive Engine Performance, 5th Edition Quiz 28A

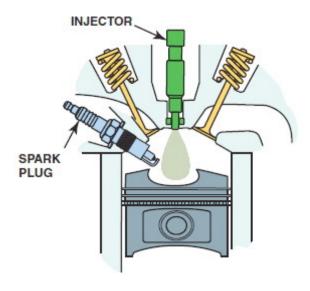
Name\_\_\_\_\_

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

<ol> <li>Where is the fuel injected in an engine equipped with gasoline direct injection?         <ul> <li>A) Into the intake manifold, near the intake valve</li> <li>B) Directly into the combustion chamber</li> <li>C) Above the intake port</li> <li>D) In the exhaust port</li> </ul> </li> </ol>	1)
<ul> <li>2) A gasoline direct injection system can be used to start an engine without the need for a starter motor.</li> <li>A) True</li> <li>B) False</li> </ul>	2)
<ul> <li>3) The high pressure fuel pump pressure is regulated by using</li> <li>A) An electric pressure control valve</li> <li>B) A vacuum biased regulator</li> <li>C) A mechanical regulator at the inlet to the fuel rail</li> <li>D) A non-vacuum biased regulator</li> </ul>	3)
<ul> <li>4) What GDI operating mode is used to burn sulfur from the NO<sub>x</sub> catalyst?</li> <li>A) Stratified mode</li> <li>B) Homogeneous stratified mode</li> <li>C) Stratified heating mode</li> <li>D) None of these</li> </ul>	4)
<ul> <li>5) The fuel injectors on a GDI engine operate under a fuel pressure of about</li> <li>A) 35 to 45 PSI</li> <li>B) 90 to 150 PSI</li> <li>C) 500 to 2900 PSI</li> <li>D) 2000 to 5000 PSI</li> </ul>	5)
6) Some GDI systems can fire the injector more than once per injection event. A) True B) False	6)
<ul> <li>7) The fuel pump inside the fuel tank on a vehicle equipped with gasoline direct injection produces about what fuel pressure?</li> <li>A) 5 to 10 PSI</li> <li>B) 10 to 20 PSI</li> <li>C) 20 to 40 PSI</li> <li>D) 50 to 60 PSI</li> </ul>	7)

## 8) A characteristic of GDI systems that could cause a customer concern is \_\_\_\_\_.

- 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
- 9) This illustration shows a \_\_\_\_\_\_ type of combustion chamber.



- A) Wall-guided
- B) Spray-guided
- C) Tumble-guided
- D) Swirl-guided
- 10) The GDI injector is held open with 50 to 90 volts.
  - A) True
  - B) False

10) \_\_\_\_\_

8) \_\_\_\_\_

9) \_\_\_\_\_

Answer Key Testname: ENGINEPERF5\_28A

1) B Page Ref: 436 2) A Page Ref: 440 3) A Page Ref: 437 4) C Page Ref: 439 5) C Page Ref: 438 6) A Page Ref: 438 7) D Page Ref: 437 8) A Page Ref: 441 9) B Page Ref: 439 10) B Page Ref: 438