

Name: _____

Date: _____

1. Who perfected the compression ignition engine in 1892?
 - A. Henry Ford
 - B. Carl Benz
 - C. Rudolf Diesel
 - D. Ferdinand Porsche

2. Which of the following best describes the diesel engine's method of ignition?
 - A. By spark plugs
 - B. Heat generated by compression
 - C. By an electric coil
 - D. By an external flame

3. What is the temperature approximately reached due to the heat of compression in a diesel engine?
 - A. 500°F (260°C.
 - B. 750°F (400°C.
 - C. 1,000°F (540°C.
 - D. 1,500°F (815°C.

4. In a direct injection (DI) diesel engine, where is the fuel injected?
 - A. Into a small pre-chamber
 - B. Into the cylinder
 - C. Into the fuel tank
 - D. Into the fuel line

5. Older diesel engines use which type of fuel system?
 - A. Mechanical injection pump
 - B. Electrical injection pump
 - C. Gravity-fed fuel system
 - D. Vacuum-based fuel system

6. Where is the diesel fuel heater placed in relation to the tank and filter?
 - A. After the primary filter
 - B. Before the fuel tank
 - C. In the fuel tank
 - D. Between the tank and the primary filter

7. What does the Ram Cummins use to warm the intake air for cold weather starting?
 - A. Diesel fuel heaters
 - B. Electrical heater wire
 - C. Thermostatically controlled fuel bypass
 - D. Wait to start lamp

8. What is the main function of a turbocharger in diesel engines?
- A. To increase engine power by pumping additional compressed air into the combustion chambers
 - B. To cool the engine
 - C. To reduce exhaust emissions
 - D. To reduce power output
9. Why is the air charge cooler needed in the turbocharger system?
- A. To increase the air temperature
 - B. To generate more exhaust gas
 - C. Because the air is heated when compressed by the turbocharger, and cooler air produces more engine power
 - D. To control the engine speed
10. Which type of particulate matter is referred to as "fine" particles?
- A. PM10
 - B. PM2.5
 - C. TSP
 - D. Particulates larger than 50 microns

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Chapter 16

Multiple Choice Quiz A

Answer Key

1. C

2. B

3. C

4. B

5. A

6. D

7. B

8. A

9. C

10. B