

Name _____

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

- 1) Which type of diesel injection produces less noise? 1) _____
A) Indirect injection (IDI)
B) Common rail
C) Direct injection
D) Distributor injection

- 2) Technician A says that diesel engines can be tested using a scan tool to determine sensor values. 2) _____
Technician B says that glow plugs can be used to locate a weak cylinder. Who is right?
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician

- 3) Selective catalytic reduction (SCR) uses urea injection to reduce _____ emissions. 3) _____
A) NO_x
B) CO₂
C) H₂O
D) CO

- 4) When compared to a gasoline engine, the diesel engine may be _____ than a similar size engine. 4) _____
A) quieter
B) lighter
C) heavier
D) easier to start in cold weather

- 5) Technician A says that a diesel engine uses the heat of compression to ignite the diesel fuel. 5) _____
Technician B says that direct injection (DI) uses a pre-combustion chamber. Who is right?
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician

- 6) The most common diesel exhaust emission test used in local testing programs is _____. 6) _____
A) the opacity test
B) the exhaust temperature test
C) the paper test
D) a "Check Engine" light test

- 7) The three phases of diesel ignition include _____. 7) _____
A) glow plug ignition, fast burn, slow burn
B) slow burn, fast burn, slow burn
C) ignition delay, rapid combustion, controlled combustion
D) glow plug ignition, ignition delay, controlled combustion

- 8) High pressure common rail fuel injectors are opened by _____. 8) _____
- A) solenoids
 - B) injector pump pressure
 - C) engine oil pressure
 - D) either A or C
- 9) What percent of opacity means the exhaust has no visible smoke and does not block light from a beam projected through the exhaust smoke? 9) _____
- A) 0%
 - B) 25%
 - C) 50%
 - D) 100%
- 10) What percent of opacity means that the exhaust is so dark that it completely blocks light from a beam projected through the exhaust smoke? 10) _____
- A) 0%
 - B) 25%
 - C) 50%
 - D) 100%