

Name \_\_\_\_\_

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

- 1) The differential pressure sensor is used to monitor the operation of the \_\_\_\_\_. 1) \_\_\_\_\_
  - A) DPF
  - B) SCR
  - C) Muffler
  - D) Tailpipe temperature
  
- 2) A wide-band oxygen sensor operation differs from a conventional oxygen sensor because it \_\_\_\_\_. 2) \_\_\_\_\_
  - A) Is able to monitor a broader air-fuel ratio
  - B) Operates at a hotter temperature
  - C) Becomes operational faster on a cold start
  - D) All of the above
  
- 3) Diesel exhaust systems are being discussed. Technician A says that the exhaust downpipe can be changed to a header system for more power. Technician B says that the exhaust downpipe is part of the emission certification and should not be changed. Which technician is correct? 3) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B
  
- 4) Diesel oxidation catalysts (DOC) are being discussed. Technician A says they are used to reduce the level of hydrocarbons (HC) in the exhaust stream. Technician B says they are used to reduce the level of carbon monoxide (CO) in the exhaust stream. Which technician is correct? 4) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B
  
- 5) The diesel oxidation catalyst converts \_\_\_\_\_ into \_\_\_\_\_ inside the catalyst. 5) \_\_\_\_\_
  - A) HC; CO<sub>2</sub> and water
  - B) NO<sub>x</sub>; S<sub>2</sub>O
  - C) Diesel fuel; heat
  - D) None of these
  
- 6) An exhaust backpressure regulator (EBPR) is being discussed. Technician A says that the regulator valve helps control idle speed during extended idle periods. Technician B says that the EBPR causes restrictions in the exhaust and can safely be removed in warm climates. Which technician is correct? 6) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B

- 7) During an active regeneration event \_\_\_\_\_. 7) \_\_\_\_\_
- A) The temperature of the DPF will be higher than during a passive regeneration event
  - B) Will only occur if a passive regeneration event is ineffective
  - C) Additional fuel will be added to the DPF
  - D) All of the above
- 8) The implementation of Tier II diesel emissions requirements in 2007 required the reduction of which two tailpipe emissions? 8) \_\_\_\_\_
- A) CO and HC
  - B) CO and NO<sub>x</sub>
  - C) PM and NO<sub>x</sub>
  - D) PM and HC
- 9) During a regeneration event the temperature increases to \_\_\_\_\_ or more in the diesel particulate filter. 9) \_\_\_\_\_
- A) 315°F
  - B) 600°F
  - C) 212°F
  - D) 100°F
- 10) A \_\_\_\_\_ can be used to measure the density of diesel exhaust fluid (DEF). 10) \_\_\_\_\_
- A) Thermometer
  - B) Voltmeter
  - C) Pressure gauge
  - D) Refractometer

## Answer Key

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1) A

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2) D

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3) B

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4) C

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5) A

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6) D

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7) D

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8) C

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9) B

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10) D

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