

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. What is the maximum allowable reading for NOX under loaded driving conditions to pass an enhanced I/M roller test?

- A. 500 ppm
- B. 1000 ppm
- C. 1500 ppm
- D. 2000 ppm

2. Which of the following is a probable cause of high levels of CO emissions?

- A. Excessively lean air-fuel mixture
- B. Excessively rich air-fuel mixture
- C. Properly functioning EGR system
- D. Efficiently operating catalytic converter

3. What does a high level of O<sub>2</sub> in the exhaust, especially at idle, indicate?

- A. Efficient combustion
- B. Rich air-fuel mixture
- C. Exhaust system leak
- D. Properly functioning catalytic converter

4. What is the result of adding 10% alcohol to gasoline in terms of exhaust emissions?

- A. Higher levels of CO and lower levels of O<sub>2</sub>
- B. Lower levels of CO and higher levels of O<sub>2</sub>
- C. No change in CO and O<sub>2</sub> levels
- D. Lower levels of both CO and O<sub>2</sub>

5. What is the required emission durability for vehicles sold in the United States under the more stringent standards than Tier 2?

- A. 100,000 miles
- B. 120,000 miles
- C. 150,000 miles
- D. 200,000 miles

6. Which of the following gases is generally considered to be the rich indicator, where higher levels indicate a richer air-fuel mixture?

- A. HC
- B. CO
- C. CO<sub>2</sub>
- D. O<sub>2</sub>

7. What does the catalytic converter use to help reduce exhaust emissions?

- A. Oxygen in the exhaust to oxidize HC and CO
- B. Carbon monoxide to reduce HC and CO<sub>2</sub>
- C. Hydrocarbons to increase CO<sub>2</sub>
- D. Nitrogen to decrease NOX

8. Which level would apply to an electric vehicle?

- A. ULEV
- B. ZEV
- C. LEV
- D. TLEV

9. All of the following exhaust emissions are measured in percentages except:

- A. HC
- B. CO
- C. CO<sub>2</sub>
- D. O<sub>2</sub>

10. What does a reading of HC 5,766 ppm, CO<sub>2</sub> 58.2%, CO 54.6%, O<sub>2</sub> 0.1% indicate about engine operation?

- A. Too rich
- B. Too lean
- C. Operating at stoichiometric ratio
- D. Engine operating temperature too high

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Chapter 79

Multiple Choice Quiz A

Answer Key

1. B

2. B

3. C

4. B

5. C

6. B

7. A

8. B

9. A

10. A