

Name _____

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

- 1) Two technicians are discussing catalytic converters. Technician A says that the exhaust should have a 14.7:1 air-fuel ratio for the best efficiency. Technician B says that the air-fuel mixture must be leaner than 14.7:1 for best performance from a three-way catalytic converter. Which technician is correct? 1) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 2) Some vehicles have a "mini converter." Where is this component located? 2) _____
 - A) Attached directly to the exhaust manifold
 - B) Downstream of the main catalytic converter
 - C) Just upstream of the muffler
 - D) None of these

- 3) The addition of cerium to catalytic converters provided what benefit? 3) _____
 - A) Reduction of NOx
 - B) Stores oxygen to help with the oxidation process
 - C) Purification of NOx
 - D) None of these

- 4) What is applied to the ceramic substrate to make the surface porous? 4) _____
 - A) Honeycomb filler
 - B) Washcoat
 - C) Aluminum
 - D) Cerium

- 5) What term describes a catalytic converter as it reaches its effective temperature? 5) _____
 - A) Light off
 - B) Initiation
 - C) Consumption
 - D) None of these

- 6) To prevent catalytic converter damage, do not crank a flooded engine longer than _____ seconds. 6) _____
 - A) 40
 - B) 15
 - C) 10
 - D) 60

- 7) A P0422 (catalytic converter efficiency failure) is set. What is a possible cause? 7) _____
- A) Engine mechanical fault
 - B) Exhaust leak
 - C) Fuel contamination
 - D) Any of these
- 8) Which exhaust gas reading indicates a good catalytic converter? 8) _____
- A) O₂ is zero
 - B) CO is zero
 - C) Both A and B
 - D) Neither A nor B
- 9) Technician A says that a converter that rattles when tapped with a mallet should be replaced. Technician B says that the root cause of the converter failure should be diagnosed and repaired before a replacement converter is installed. Which technician is correct? 9) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 10) When observing O₂S waveforms on a DSO on an OBD-II vehicle, which O₂ sensor should have more oscillations in its O₂S waveform? 10) _____
- A) Upstream
 - B) Downstream
 - C) They will be equal
 - D) None of these

Answer Key

Testname: AT6_88A

1) A

Page Ref: 1011

2) A

Page Ref: 1011

3) B

Page Ref: 1011

4) B

Page Ref: 1010

5) A

Page Ref: 1011

6) A

Page Ref: 1013

7) D

Page Ref: 1015

8) B

Page Ref: 1015

9) C

Page Ref: 1013, 1015

10) A

Page Ref: 1012