

Name _____

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

- 1) The addition of cerium to catalytic converters provided what benefit? 1) _____
 - A) Reduction of NO_x
 - B) Stores oxygen to help with the oxidation process
 - C) Purification of NO_x
 - D) None of these

- 2) A catalytic converter has to be at least how hot before it begins to work? 2) _____
 - A) 500 degrees F
 - B) 1,000 degrees F
 - C) 1,500 degrees F
 - D) 2,000 degrees F

- 3) When observing O₂S waveforms on a DSO on an OBD-II vehicle, which O₂ sensor should have more oscillations in its O₂S waveform? 3) _____
 - A) Upstream
 - B) Downstream
 - C) They will be equal
 - D) None of these

- 4) What two primary sensors does the PCM use to check the catalytic converter? 4) _____
 - A) Catalytic converter temperature sensor and rear oxygen sensor
 - B) Pre-cat and post-cat oxygen sensor
 - C) Pre-cat oxygen sensor and MAF
 - D) MAP and TP

- 5) A P0422 (catalytic converter efficiency failure) is set. What is a possible cause? 5) _____
 - A) Engine mechanical fault
 - B) Exhaust leak
 - C) Fuel contamination
 - D) Any 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) Two technicians are discussing the testing of a catalytic converter. Technician A says that a vacuum gauge can be used and observed to see if the vacuum drops with the engine at 2500 RPM for 30 seconds. Technician B says that a pressure gauge can be used to check for backpressure. Which technician is correct? 7) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 8) What is the minimum ECT temperature value required for the catalyst efficiency monitor to run under OBD-II? 8) _____
- A) 165 degrees F
 - B) 180 degrees F
 - C) 195 degrees F
 - D) None of these
- 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) A catalytic converter can be harmed by _____. 10) _____
- A) excessive engine oil
 - B) antifreeze
 - C) sulfur from poor-quality fuel
 - D) any of the above