

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

1. Why did the manufacturers begin using EEPROM in 1996?
  - A. To improve vehicle performance
  - B. To meet air quality and emission standards
  - C. To facilitate easier updates to the software calibration
  - D. To reduce the cost of repairs
  
2. What is the primary purpose of aftermarket programmers or “tuners”?
  - A. To increase fuel efficiency
  - B. To increase torque and horsepower
  - C. To improve emission compliance
  - D. To update the vehicle's infotainment system
  
3. What is the significance of the National Automotive Service Task Force (NASTF) in module reprogramming?
  - A. It provides resources for technicians to apply for a locksmith ID
  - B. It regulates the use of aftermarket tuners
  - C. It develops the J2534 standard
  - D. It oversees the compliance of emission-related repairs
  
4. What is the role of a pass-through device in module reprogramming?
  - A. It serves as a connection point for hardware communication
  - B. It stores the software needed for reprogramming
  - C. It acts as a power source during reprogramming
  - D. It is a diagnostic tool for identifying module faults
  
5. What is the purpose of the J2534 standard?
  - A. To standardize the data link connector
  - B. To allow for the reprogramming of emission-related modules
  - C. To provide a universal diagnostic tool
  - D. To ensure that all vehicles are OBDII compliant
  
6. What is the difference between on-board and off-board programming?
  - A. On-board is done at the dealership, off-board at a local parts store
  - B. On-board requires a pass-through device, off-board does not
  - C. On-board is performed with the module in the vehicle, off-board with the module removed
  - D. There is no difference; they are interchangeable terms
  
7. What is remote programming?
  - A. Reprogramming done by the vehicle owner
  - B. Reprogramming performed at a distance by a third party
  - C. An automated reprogramming process
  - D. Reprogramming done without the need for internet access

8. Why do some aftermarket programmers or “tuners” cause a failure at the emission test lane?
- A. They improve emission compliance
  - B. They are not recognized by the vehicle's computer
  - C. They are typically used for non-emission related updates
  - D. They interfere with the vehicle's diagnostic monitors
9. What is the main purpose of the regulation that required all modules responsible for emissions control to have EEPROM by 1996?
- A. To make reprogramming easier for technicians
  - B. To reduce the cost of module replacement
  - C. To allow for over-the-air updates
  - D. To prevent the installation of software that would take the vehicle out of emission compliance
10. What is a unique feature of a battery maintainer compared to a battery charger?
- A. It can charge the battery faster
  - B. It maintains a specific voltage without fluctuations
  - C. It is cheaper and more readily available
  - D. It can be used for general shop use

Automotive Technology 7th Edition

Chapter 84

Multiple Choice Quiz B

Answer Key

1. B

2. B

3. A

4. A

5. B

6. C

7. B

8. D

9. D

10. B