

**Automotive Electrical and Engine Performance 9th Edition**  
**Chapter 46 – Strategy-Based Diagnosis**  
**Multiple Choice Questions Quiz A**

1. The initial step in the diagnostic process, according to strategy-based diagnostics, is to:
  - a) Retrieve any diagnostic trouble codes (DTCs)
  - b) Verify the customer's concern
  - c) Check for technical service bulletins (TSBs)
  - d) Perform a system scan
  
2. Technician A states that a pending code indicates a fault has been detected but not repeated. Technician B states that pending codes require immediate repair. Who is correct?
  - a) Technician A only
  - b) Technician B only
  - c) Both Technicians A and B
  - d) Neither Technician A nor B
  
3. A visual inspection during diagnostics should include:
  - a) Measuring fuel trim levels at idle
  - b) Verifying DTCs on a scan tool
  - c) Checking for obvious issues like loose connections or leaks
  - d) Performing a cylinder balance test
  
4. The purpose of a technical service bulletin (TSB) is to:
  - a) Provide general maintenance guidelines
  - b) Offer specific repair instructions for common vehicle issues
  - c) Store customer vehicle data
  - d) Replace outdated repair procedures in the owner's manual

5. During which diagnostic step is it essential to check the freeze-frame data to understand the conditions at the time a DTC was set?

- a) Initial vehicle inspection
- b) Post-repair verification
- c) System troubleshooting
- d) Scan tool data analysis

6. When using a smoke machine for diagnostics, it is most commonly employed to:

- a) Test fuel injector spray patterns
- b) Locate vacuum leaks
- c) Measure fuel pressure stability
- d) Confirm cylinder compression

7. Technician A states that intermittent issues are often caused by faulty sensors. Technician B states that intermittent problems are best diagnosed using drive cycle data. Who is correct?

- a) Technician A only
- b) Technician B only
- c) Both Technicians A and B
- d) Neither Technician A nor B

8. The main benefit of using a scan tool with bidirectional capability is:

- a) Automatic setting of DTCs
- b) The ability to activate components to verify their operation
- c) Enhanced data storage for customer records
- d) Passive observation of real-time sensor data only

9. Which drive cycle condition must be met for the PCM to complete readiness monitors after clearing DTCs?

- a) Engine at full throttle
- b) High-speed acceleration
- c) Vehicle driven under specific conditions that simulate normal operation
- d) Vehicle parked with engine idling for extended time

10. Technician A says a universal drive cycle can be used to reset monitors in most vehicles. Technician B says each manufacturer has its own specific drive cycle. Who is correct?

- a) Technician A only
- b) Technician B only
- c) Both Technicians A and B
- d) Neither Technician A nor B

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**Answer Key Quiz A**

**Correct Answers:**

1. b
2. a
3. c
4. b
5. d
6. b
7. c
8. b
9. c
10. c