

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

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

1. How is the airflow from the SAI pump directed when the engine is cold?
  - A. To the atmosphere
  - B. To the catalytic converter
  - C. To the exhaust manifold
  - D. To the air cleaner assembly
  
2. What could be a possible cause for repeated failures of the switching valves on the air pump?
  - A. A defective exhaust check valve
  - B. A leaking exhaust system at the muffler
  - C. A malfunctioning catalytic converter
  - D. Both A and B
  
3. What is the expected increase in oxygen (O<sub>2</sub>) levels when the SAI pump is functioning properly?
  - A. 1% to 4%
  - B. 5% to 10%
  - C. 10% to 20%
  - D. Up to 30%
  
4. What is the function of the diverter valves in the SAI system?
  - A. To regulate the temperature of the exhaust gases
  - B. To direct air to the exhaust manifold or catalytic converter
  - C. To filter the air before it enters the engine
  - D. To release excess air pressure
  
5. What is the significance of the centrifugal filter in a belt-driven air pump?
  - A. It cools the air before it enters the pump
  - B. It compresses the air slightly as it enters the pump
  - C. It removes impurities from the oil
  - D. It regulates the airflow based on engine speed
  
6. What is a symptom that may indicate a problem with the SAI system?
  - A. Increased fuel efficiency
  - B. Reduced engine noise
  - C. Exhaust emissions test failure
  - D. Improved engine performance
  
7. What does the PCV monitor detect as part of the OBD-II system?
  - A. The temperature of the PCV valve
  - B. An opening in the PCV system
  - C. The pressure within the crankcase
  - D. The cleanliness of the PCV valve

8. What is the purpose of the air pump's external air manifold?  
A. To distribute air through injection tubes to the exhaust system  
B. To cool the air before it enters the engine  
C. To filter the exhaust gases  
D. To measure the air pressure

9. What is a visual inspection of the SAI system likely to reveal if there is a problem?  
A. Holes and leaks in hoses and pipes  
B. Incorrect air pressure in the system  
C. Temperature irregularities in the exhaust gases  
D. Variations in engine speed

10. What is the role of the PCV system's crankcase vacuum test?  
A. To measure the oil level  
B. To check for blockages in the PCV system  
C. To determine the efficiency of the air filter  
D. To monitor the temperature of the crankcase

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Chapter 81

Multiple Choice Quiz B

Answer Key

1. C

2. D

3. A

4. B

5. B

6. C

7. B

8. A

9. A

10. B