

Name _____

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

- 1) A P0401 DTC (exhaust gas recirculation flow insufficient) is being discussed. Technician A says that a defective EGR valve could be the cause. Technician B says that clogged EGR passages could be the cause. Which technician is correct? 1) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 2) At about what temperature does oxygen combine with the nitrogen in the air to form NO_x? 2) _____
 - A) 500 degrees F
 - B) 750 degrees F
 - C) 1500 degrees F
 - D) 2500 degrees F

- 3) Blocking off the EGR valve passages will have no effect on the OBD-II system. 3) _____
 - A) True
 - B) False

- 4) Which type of EGR valve requires a positive exhaust system pressure to operate? 4) _____
 - A) Positive backpressure
 - B) Negative backpressure
 - C) Linear
 - D) Digital

- 5) Which exhaust emission is formed by high combustion chamber temperatures? 5) _____
 - A) NO_x
 - B) HC
 - C) CO
 - D) CO₂

- 6) Two technicians are discussing clogged EGR passages. Technician A says that clogged EGR passages can cause excessive NO_x exhaust emission. Technician B says that clogged EGR passages can cause the engine to ping (spark knock or detonation). Which technician is correct? 6) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 7) A vehicle comes into the shop and the technician retrieves the diagnostic code P0401 "EGR flow insufficient." Which of these could be the cause? 7) _____
 - A) Clogged EGR ports or passages
 - B) EGR valve stuck open
 - C) Electrical wiring shorted
 - D) All of these are correct.

- 8) Exhaust gas recirculation (EGR) is generally not needed under any of the following conditions EXCEPT _____. 8) _____
- A) idle speed
 - B) cold engine
 - C) cruise speed
 - D) wide open throttle (WOT)
- 9) What causes the nitrogen and oxygen in the air to combine and form NOx? 9) _____
- A) Sunlight
 - B) Any spark will cause this to occur
 - C) Heat above 2,500°F (1,370°C)
 - D) Chemical reaction in the catalytic converter
- 10) A typical EGR pintle-position sensor is what type of sensor? 10) _____
- A) Potentiometer
 - B) Rheostat
 - C) Wheatstone bridge
 - D) Piezoelectric

Answer Key

Testname: AT6_86B

- 1) C
Page Ref: 1001
- 2) D
Page Ref: 996
- 3) B
Page Ref: 999
- 4) A
Page Ref: 997
- 5) A
Page Ref: 996
- 6) C
Page Ref: 1000
- 7) A
Page Ref: 1001
- 8) C
Page Ref: 996-997
- 9) C
Page Ref: 996
- 10) A
Page Ref: 998