Automotive Electrical and Engine Performance, 8th Edition Quiz 34A

Name\_\_\_\_\_

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

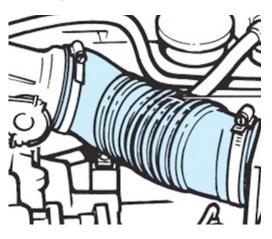
- A P0102 DTC is being discussed. Technician A says that a sensor circuit shorted-to-ground can

   be the cause. Technician B says that an open sensor voltage supply circuit could be the cause.
   Which technician is correct?
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 2) The component shown (shaded) has a crack or split in it. What would this cause?

2) \_\_\_\_\_

3)

4) \_\_\_\_\_



- A) Poor running in a forward gear but OK in reverse
- B) Allow false air into the engine
- C) Either A or B
- D) Neither A nor B

3) If the MAF sensor fails, the PCM uses \_\_\_\_\_\_ to calculate fuel delivery needs.

- A) MAP and throttle position
- B) RPM and throttle position
- C) throttle position and transmission RPM
- D) RPM alone
- 4) Two technicians are diagnosing a poorly running engine. There are no diagnostic trouble codes. When the MAF sensor is unplugged, the engine runs better. Technician A says that this means the MAF is supplying incorrect air flow information to the PCM. Technician B says that this indicates the PCM is defective. Which technician is correct?
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician

<ul> <li>5) Which of the following components measures the volume and density of the incoming air?</li> <li>A) Oxygen Sensor</li> <li>B) Throttle Position Sensor</li> <li>C) Mass Airflow Sensor</li> <li>D) Manifold Absolute Pressure Sensor</li> </ul>	5)
<ul> <li>6) A fuel injection system that does not use a sensor to measure the amount (or mass) of air entering the engine is usually called a(n) type of system.</li> <li>A) air vane controlled</li> <li>B) speed density</li> <li>C) mass air flow</li> <li>D) hot wire</li> </ul>	6)
<ul> <li>7) MAF sensor electrical connectors should be checked for all of these, EXCEPT</li> <li>A) Corrosion</li> <li>B) Terminals bent or pushed out of the plastic connector</li> <li>C) Frayed wiring</li> <li>D) Tight connectors</li> </ul>	7)
<ul> <li>8) Technician A says that a MAF sensor actually measures the density and amount of air flowing into the engine, which results in accurate engine control. Technician B says that a hot wire MAF sensor uses the electronics in the sensor itself to heat a wire 70°C above the temperature of the air entering the engine. Which technician is correct? <ul> <li>A) Technician A only</li> <li>B) Technician B only</li> <li>C) Both technicians</li> <li>D) Neither technician</li> </ul></li></ul>	8)
<ul> <li>9) A P0103 DTC is being discussed. Technician A says that a sensor circuit shorted-to-ground can be the cause. Technician B says that a defective MAF sensor could be the cause. Which technician is correct?</li> <li>A) Technician A only</li> <li>B) Technician B only</li> <li>C) Both technicians</li> <li>D) Neither technician</li> </ul>	9)
<ul> <li>10) Dirt can affect all of these sensors, EXCEPT</li> <li>A) Low frequency (older style) MAF</li> <li>B) High frequency (new style) MAF</li> <li>C) Hot wire MAF (mass air flow sensor)</li> <li>D) Cold wire MAF (mass air flow sensor)</li> </ul>	10)

Answer Key Testname: AEEP8\_34A

> 1) C Page Ref: 474 2) C Page Ref: 474 3) A Page Ref: 470 4) A Page Ref: 475 5) C Page Ref: 470 6) B Page Ref: 470 7) D Page Ref: 473 8) C Page Ref: 470-471 9) B Page Ref: 474 10) D Page Ref: 472