

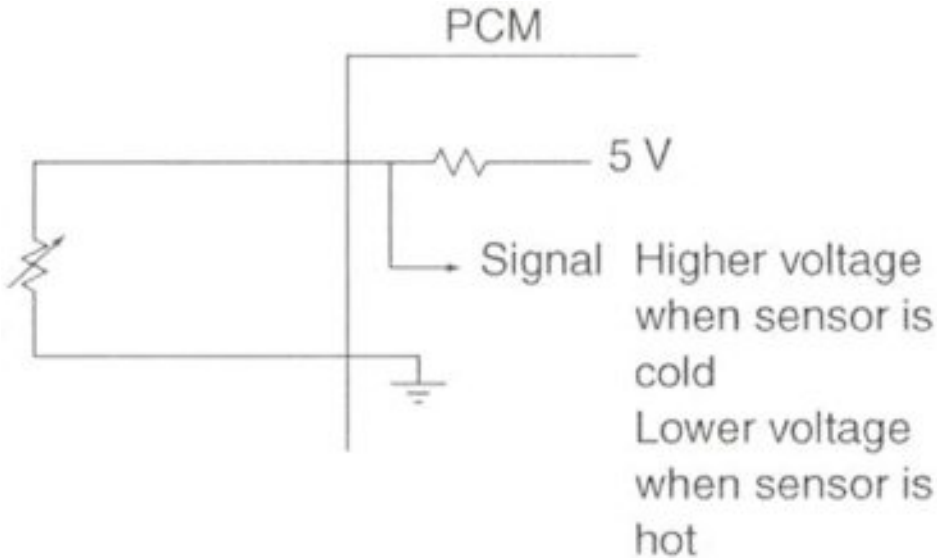
Name _____

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

- 1) A P0118 DTC is being discussed. Technician A says that the ECT sensor could be shorted internally. Technician B says that the signal wire could be open. Who is right? 1) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 2) A typical IAT or ECT sensor reads about 3000 ohms when tested using a DMM. This resistance represents a temperature of about _____. 2) _____
- A) -40° F (-40° C)
 - B) 70° F (20° C)
 - C) 120° F (50° C)
 - D) 284° F (140° C)
- 3) Technician A says that the ECT and IAT sensors can be tested visually, as well as by using a digital multimeter or a scan tool. Technician B says that the ECT sensor is a high-authority sensor at engine start-up and is used for open-loop control, as well as idle speed. Who is right? 3) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 4) A P0113 DTC is being discussed. Technician A says that the IAT sensor could be internally (electrically) shorted. Technician B says that the PCM could be defective. Who is right? 4) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 5) All of the following are approved methods or tools used when diagnosing an ECT (engine coolant temperature) sensor EXCEPT _____. 5) _____
- A) scan tool
 - B) digital multimeter (DMM)
 - C) observing resistance values at a specified temperature
 - D) substituting a variable resistor

6) What type of circuit is shown in this schematic?

6) _____



- A) Step-up transformer circuit
- B) Negative temperature coefficient (NTC) thermistor circuit
- C) Positive temperature coefficient (PTC) thermistor circuit
- D) Oxygen (O₂S) sensor circuit

7) A P0117 DTC is being discussed. Technician A says that the ECT sensor could be internally shorted to ground. Technician B says that the signal wire could be open. Who is right?

7) _____

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician

8) The IAT is being tested. After the vehicle has been allowed to cool for several hours, a scan tool is used to observe the IAT, and compare it to the engine coolant temperature (ECT). The two temperatures should be within how many degrees F of each other?

8) _____

- A) 5
- B) 10
- C) 15
- D) 25

9) Technician A says that temperature sensors decrease in resistance as the temperature increases; this is called positive temperature coefficient (PTC). Technician B says that some vehicle manufacturers use a stepped ECT circuit inside the PCM to broaden the accuracy of the sensor. Who is right?

9) _____

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician

- 10) Technician A says that other temperature sensors that operate like the ECT include transmission fluid temperature (TFT), and engine oil temperature sensors. Technician B says that all temperature sensors increase in resistance as the temperature decreases. Who is right? 10) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician