

Name \_\_\_\_\_

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

- 1) A passive wheel speed sensor is producing lower than expected voltage as the wheel rotates. Which of these is NOT a possible cause? 1) \_\_\_\_\_  
A) Debris on the sensor  
B) Incorrect air gap between the sensor and toothed ring  
C) Damaged or corroded electrical connector  
D) Failed ABS control module
- 2) A passive-type wheel speed sensor (WSS) is being checked for the proper resistance, which should be 800-2,500 ohms. The meter reads 1.1 k $\Omega$ . This means \_\_\_\_\_ 2) \_\_\_\_\_  
A) the sensor has a normal resistance reading  
B) the sensor is electrically shorted  
C) the sensor is electrically open  
D) the sensor is grounded
- 3) The red brake warning lamp is on and the amber ABS lamp is off. Technician A says that a fault is possible in the base brake system. Technician B says that the red brake warning lamp can be turned on by a low brake fluid level in the master cylinder. Which technician is correct? 3) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 4) Technician A says that a scan tool is required to retrieve data and diagnostic trouble codes from most antilock braking systems. Technician B says that a jumper wire can be used to retrieve diagnostic codes on some early antilock braking systems. Which technician is correct? 4) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 5) When observing WSS output with an oscilloscope, most sensors should produce \_\_\_\_\_. 5) \_\_\_\_\_  
A) an AC sine wave that increases in amplitude as wheel speed increases  
B) an AC sine wave that increases in frequency as wheel speed increases  
C) Both A and B are correct.  
D) Neither A nor B is correct.
- 6) Two technicians are discussing passive-type wheel speed sensors. Technician A says that wheel speed sensors are magnetic. Technician B says that the toothed sensor ring is magnetic. Which technician is correct? 6) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician

- 7) The ABS computer uses what signal characteristic from a wheel speed sensor? 7) \_\_\_\_\_
- A) Voltage
  - B) Frequency
  - C) Resistance
  - D) Electromagnetic
- 8) Technician A says that the test drive is an important diagnostic step to verify customer ABS concerns. Technician B says that if the red brake warning light is on, the conventional brake system should be repaired first, before driving. Which technician is correct? 8) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 9) A cracked tone (reluctor) ring will often cause what type of problem? 9) \_\_\_\_\_
- A) The antilock brake system will be disabled and the amber ABS warning lamp will be on
  - B) False ABS activation at low speed
  - C) A brake failure which will turn on the red brake warning light
  - D) The affected wheel brake will be applied all of the time
- 10) A good wheel speed sensor should produce at least \_\_\_\_\_ with the wheel turning. 10) \_\_\_\_\_
- A) 0.1 volt AC
  - B) 1 volt DC
  - C) 0.1 volt DC
  - D) 1 volt AC