

Name \_\_\_\_\_

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

- 1) When observing WSS output with an oscilloscope, most sensors should produce \_\_\_\_\_. 1) \_\_\_\_\_
  - 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.
  
- 2) 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? 2) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
  
- 3) The ABS computer uses what signal characteristic from a wheel speed sensor? 3) \_\_\_\_\_
  - A) Voltage
  - B) Frequency
  - C) Resistance
  - D) Electromagnetic
  
- 4) A cracked tone (reluctor) ring will often cause what type of problem? 4) \_\_\_\_\_
  - 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
  
- 5) 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? 5) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
  
- 6) Most wheel speed sensors should measure how much resistance? 6) \_\_\_\_\_
  - A) 800 to 2,500 ohms
  - B) 100 to 300 ohms
  - C) 1 to 3 ohms
  - D) 0.1 to 1 ohm

- 7) 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 \_\_\_\_\_. 7) \_\_\_\_\_
- 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
- 8) Technician A says that, with some early antilock braking systems, there is no trouble code memory. Technician B says that older antilock braking systems require that a terminal be grounded to cause the amber ABS warning lamp to flash diagnostic trouble codes. Which technician is correct? 8) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 9) What reference voltage (supply voltage) is used with digital wheel speed sensors? 9) \_\_\_\_\_
- A) 12 volts DC
  - B) 12 volts AC
  - C) 5 volts DC
  - D) None of these
- 10) Technician A says that a breakout box is often required to diagnose an antilock braking system. Technician B says that a breakout box requires to use of a digital multimeter. Which technician is correct? 10) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician