Chapter 22 – Answer Key

ASE-STYLE REVIEW QUESTIONS

1. Technician A says that voltage is the pressure that pushes electricity through the wire or circuit. Technician B says that voltage is measured by using a voltmeter. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

2. Technician A says that an inductive ammeter should be used to check starter current draw. Technician B says that a small ammeter in series will work better. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

3. A fuse box is often located \_\_\_\_\_\_\_\_.

a. Under the instrument panel

b. Behind a panel in the foot well

c. In the engine compartment

d. All of the above

4. Technician A says wire color coding allows you to find a specific wire in a harness or connector. Technician B says different auto makers use different color-code abbreviations on their wiring diagrams. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

5. Technician A says a testlight can be used to troubleshoot computer circuits. Technician B says that this could damage the computer circuitry. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

6. If you were going to measure approximately 12 volts with a multimeter, what meter range setting would you use?

a. 5V

b. 10V

c. 20V

d. 100V

7. A fully charged battery should produce how much voltage when read with a multimeter?

a. 12V

b. 12.5V

c. 12.6V

d. 13V

8. A fuse blows when replaced. Technician A says it is okay to use a fuse with a higher rating to keep it from blowing. Technician B says this could start an electrical fire. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

9. A new battery goes dead overnight. Technician A says to check for a battery drain. Technician B says to replace the battery. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

10. A check engine light in the dash glows after doing body repairs. Technician A says that this is not a concern. Technician B says that a scan tool should be connected to the vehicle before releasing it to the customer. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

ESSAY QUESTIONS

1. Explain the difference between voltage, current, and resistance.

2. Summarize the three major parts of a computer system.

3. Before making adjustments to a vehicle’s headlights, what should you do to make sure the vehicle is level?

MATH PROBLEMS

1. When adjusting headlights, you find the front curb height measurement to be 12.6 inches (320 mm). Specs call for a minimum ride height of 13.2 inches (335 mm). How much is the vehicle out of spec?

2. A circuit has 12.6 volts applied to it from the battery. An ohmmeter says the circuit has 10 ohms resistance. Using Ohm’s Law, how much current would flow through this circuit?