

**Automotive Electrical and Engine Performance 8th Edition**  
**Chapter 7 – In-Vehicle Engine Service**  
**Quiz B**

1. What are the four basic functions of a vehicle computer?
  - a. Input, processing, storage, and output
  - b. Reading, printing, timing, and output
  - c. Memory allocation, processing, resetting, and storage
  - d. Voltage conversion, memory, input, and calibration
  
2. A skewed thermostat means it is \_\_\_\_\_.
  - a. Contaminated with coolant
  - b. Not functioning
  - c. Working, but not at the correct temperature
  - d. Missing thermo wax in the heat sensor
  
3. What sound is commonly produced by a gasoline direct-injected engine during operation?
  - a. Whirring
  - b. Strong exhaust smells
  - c. Clicking noise
  - d. Vibrations
  
4. What causes water pumps to fail in providing proper coolant flow?
  - a. Leaking coolant from the weep hole
  - b. A noisy bearing
  - c. Worn or slipping impeller blades
  - d. Shaft looseness from bearing failure

5. What can lead to the failure of intake manifold gaskets in V-type engines?
- a. Incorrect torque application
  - b. Contamination from hybrid oils
  - c. Relative movement between the intake manifold and cylinder head
  - d. Coolant deterioration of nylon gaskets
6. What diagnostic trouble code (DTC) indicates a thermostat malfunction related to engine coolant temperature?
- a. P0171
  - b. P0128
  - c. P0300
  - d. P0172
7. When adjusting engine valves, what is the recommended initial step?
- a. Referencing service specifications for procedures
  - b. Removing the valve cover
  - c. Ensuring camshaft alignment with the base circle
  - d. All of the above
8. For plastic intake manifolds, torque specifications are often measured in \_\_\_\_\_.
- a. Pound-inches
  - b. Pound-feet
  - c. Kilogram-meters
  - d. Newton-meters
9. What additional components are recommended for replacement when changing a timing belt?
- a. Tensioner assembly
  - b. Camshaft oil seals
  - c. Water pump
  - d. All of the above

10. What is the typical oil viscosity specified for hybrid electric vehicles?

- a. SAE 5W-30
- b. SAE 0W-16
- c. SAE 5W-20
- d. SAE 10W-40

**Automotive Electrical and Engine Performance 8th Edition**

**Chapter 7 – In-Vehicle Engine Service**

**Quiz B**

**Correct Answers:**

1. a

2. c

3. d

4. c

5. b

6. d

7. b

8. a

9. c

10. d