

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. What type of motor is commonly used in most electric power steering (EPS) systems?
  - A. AC brush type
  - B. DC brushless
  - C. Stepper
  - D. Induction
  
2. What is the advantage of electric power steering systems over hydraulic power steering systems?
  - A. More complex assembly
  - B. Higher power consumption
  - C. Improved fuel economy
  - D. Requires more maintenance
  
3. What is the typical power output of an electric motor used in electric power steering systems?
  - A.  $\frac{1}{4}$  horsepower
  - B.  $\frac{1}{2}$  horsepower
  - C.  $\frac{3}{4}$  horsepower
  - D. 1 horsepower
  
4. What is the relationship between the PSCM and the PCM?
  - A. They are usually wired together
  - B. There is no connection between the two
  - C. They use serial data lines to communicate
  - D. They are mounted together on the EPS motor
  
5. What diagnostic equipment is typically required to diagnose faults in the electric power steering system?
  - A. A factory or factory-level scan tool
  - B. A multimeter
  - C. A simple OBD-II scanner
  - D. A digital oscilloscope
  
6. What is the function of self-park systems in relation to power steering?
  - A. To automatically steer the vehicle into a parking spot
  - B. To provide additional steering assist
  - C. To increase fuel efficiency
  - D. To monitor the steering fluid level
  
7. What sensors are used by self-park systems to perform the parking maneuver?
  - A. Wheel speed sensors
  - B. Steering wheel position sensor
  - C. Ultrasonic sensors
  - D. All of the above

8. What is the primary purpose of the electrohydraulic power steering (EHPS)?

- A. To provide electrical power to the vehicle
- B. To provide hydraulic power to the steering gear and brake booster
- C. To monitor the vehicle's speed
- D. To control the vehicle's transmission

9. What is the consequence of using the wrong terminal for jump-starting a vehicle with electric power steering?

- A. The battery will discharge quickly
- B. The alternator will be damaged
- C. A fuse related to the power steering may blow
- D. The power steering fluid will leak

10. What is the primary benefit of electric power steering systems for vehicle manufacturers?

- A. Increased vehicle weight
- B. More complex vehicle assembly
- C. Reduced engine load and improved cold weather starting
- D. Higher maintenance costs

Automotive Technology 7th Edition

Chapter 118

Multiple Choice Quiz B

Answer Key

1. B

2. C

3. B

4. C

5. A

6. A

7. D

8. B

9. C

10. C