

Name: _____

Date: _____

1. What components are included in a typical steering column assembly?
 - A. Steering wheel and airbag
 - B. Ignition lock and turn signal lever
 - C. Flexible coupling and universal joint
 - D. All of the above

2. How is the motion transferred to the front wheels through a conventional steering gear when the driver turns the steering wheel?
 - A. Via the pitman arm
 - B. Through the sector gear
 - C. By the steering shaft
 - D. Through the rack-and-pinion

3. What is the purpose and function of a pitman arm?
 - A. To connect the steering box to the wheel
 - B. To transfer motion from the sector gear to the steering linkage
 - C. To provide a pivot point for the steering knuckle
 - D. To adjust the steering gear ratio

4. What are some features of a rack-and-pinion steering system?
 - A. It has a variable gear ratio
 - B. It uses a pitman arm
 - C. It includes inner tie rods protected by boots
 - D. It operates with a sector gear

5. What is the purpose of a collapsible steering column?
 - A. To absorb energy during a crash
 - B. To provide adjustment for driver comfort
 - C. To connect the steering wheel to the steering gear
 - D. To allow for easy installation and removal

6. The circuit to the airbag inflation module is connected from the steering column to the steering wheel through which component?
 - A. Slip ring and carbon brushes
 - B. Clockspring (coil)
 - C. Magnetic field sensor
 - D. Hall-effect switch

7. After removing the center nut, what tool should be used to remove the steering wheel from the steering shaft?
 - A. Puller
 - B. Hammer
 - C. Shaft depressor
 - D. Snap ring plier

8. Which part in the steering column allows for changes in the angle between the upper and lower shafts?

- A. Flexible coupling
- B. Column cover
- C. Universal joint
- D. Collapsible section

9. The rotation of the steering wheel causes which part to move the actual steering linkage in a conventional steering gear?

- A. Sector shaft
- B. Pitman arm
- C. Worm gear
- D. Gear nut

10. If the driver rotates the steering wheel one-half of one revolution (180 degrees) on a vehicle equipped with a steering gear with a 20:1 gear ratio, how many degrees will the front wheels be rotated?

- A. 9 degrees
- B. 0.1 degree
- C. 90 degrees
- D. 11.1 degrees

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Chapter 115

Multiple Choice Quiz A

Answer Key

1. D

2. A

3. B

4. C

5. A

6. B

7. A

8. C

9. B

10. A