

Name: _____ Date: _____

1. What is the primary function of a transfer case in a four-wheel-drive (4WD) vehicle?
 - A. To increase fuel efficiency
 - B. To deliver engine torque to either one or both drive axles
 - C. To reduce vehicle weight
 - D. To improve aerodynamics

2. In 4WD vehicles, what is the purpose of having two differentials?
 - A. To allow drive wheels to travel different distances and speeds
 - B. To control vehicle speed
 - C. To enhance braking performance
 - D. To distribute fuel evenly

3. What does the term "4x4" mean in the context of vehicle drive systems?
 - A. Four-wheel drive with four gears
 - B. Four wheels with four differentials
 - C. Four-wheeled vehicle with torque applied to all four wheels
 - D. Four-wheel steering system

4. Which system is essential in an all-wheel-drive vehicle for allowing the front and rear wheels to travel different distances?
 - A. Anti-lock Braking System (ABS)
 - B. Central differential
 - C. Traction Control System (TCS)
 - D. Electronic Stability Program (ESP)

5. How are part-time four-wheel-drive systems characterized?
 - A. By the presence of a center differential
 - B. By a continuous all-wheel drive
 - C. By an automatic torque split
 - D. By the absence of a center differential

6. What happens if a part-time four-wheel-drive vehicle is driven on dry pavement in 4WD mode?
 - A. Improved traction
 - B. Increased fuel efficiency
 - C. Driveline binding
 - D. Enhanced cornering

7. What is the role of locking hubs in a four-wheel-drive system?
 - A. To lock the steering wheel
 - B. To connect the front wheels to the drivetrain
 - C. To increase engine torque
 - D. To engage the ABS

8. What type of configuration is commonly used in truck-based four-wheel systems?

- A. Front engine – RWD
- B. Mid-engine – RWD
- C. Rear engine – RWD
- D. Front engine – FWD

9. What is a power transfer unit (PTU) primarily used for in a four-wheel-drive vehicle?

- A. To transfer power to the rear axle
- B. To control the steering mechanism
- C. To distribute weight evenly
- D. To cool the engine

10. How does a transfer case in a part-time four-wheel-drive system typically operate?

- A. By an automatic transmission
- B. By a sliding gear to gear arrangement
- C. By electronic sensors
- D. By hydraulic pressure

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Chapter 15

Multiple Choice Quiz A

Answer Key

1. B

2. A

3. C

4. B

5. D

6. C

7. B

8. A

9. A

10. B