

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) A transfer case contains all of the following components, EXCEPT \_\_\_\_\_. 1) \_\_\_\_\_  
A) front output shaft  
B) shift mechanism  
C) four drive sprockets  
D) planetary gearset assembly
- 2) The planetary gearsets used in transfer cases consist of all of the following components EXCEPT \_\_\_\_\_ 2) \_\_\_\_\_  
A) sun gear  
B) internal ring gear  
C) planet carrier assembly  
D) forward clutch
- 3) A transfer case is difficult to shift (range shift). Technician A says that the shift linkage or shift fork may be worn or damaged. Technician B says that the blocking ring may be worn or damaged. Which technician is correct? 3) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 4) Two technicians are discussing the viscous coupling used in all-wheel drive systems. Technician A says a viscous fluid such as a silicon-based oil is added to the assembly and fills the areas between the clutch plates. Technician B says the viscous coupling is active during equal traction conditions. Which technician is correct? 4) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 5) Technician A says the held member of a planetary gearset is called the drive member. Technician B says the held member of a planetary gearset is called the reaction member. Which technician is correct? 5) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 6) An AWD transfer case must include a \_\_\_\_\_. 6) \_\_\_\_\_  
A) shifter for the front output shaft  
B) differential  
C) low-range gear set  
D) all of these

- 7) Technician A says that a range shift is used to select high or low gear ratios within the transfer case. Technician B says that a mode shift is used to select two wheel drive or four wheel drive. Which technician is correct? 7) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 8) Two technicians are discussing the towing of a four-wheel-drive vehicle. Technician A says that the vehicle should be transported on a flatbed truck to avoid the possibility of doing damage to the drive train. Technician B says that the wheels not lifted off the ground by the tow truck should be placed on a dolly to prevent doing damage to the drive train. Which technician is correct? 8) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 9) Technician A says a 4WD transfer case is an auxiliary 2-speed transmission. Technician B says a planetary gearset provides a low and high range. Which technician is correct? 9) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 10) Technician A says that a transfer case may use GL-4 gear lube such as SAE 80W-90. Technician B says that a transfer case may use automatic transmission fluid (ATF). Which technician is correct? 10) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician