

Name _____

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

- 1) Technician A says that the gear ratios of both differentials are the same in a four-wheel-drive vehicle. Technician B says that the rear differential has a slightly higher ratio (lower number) than the front differential. Which technician is correct? 1) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 2) When part-time 4WD vehicles in 4WD are engaged in a turn, which of these occur? 2) _____
- A) The rear wheels travel faster and farther than the front wheels.
 - B) The front wheels travel faster and farther than the rear wheels.
 - C) The rear wheels turn faster and farther than the front wheels.
 - D) The front wheels will have reduced toe-out on turns.
- 3) 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? 3) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 4) Technician A says that a vehicle equipped with part-time four-wheel drive should be driven in four-wheel drive only on slippery surfaces. Technician B says that full-time four-wheel-drive vehicles use a center differential in the transfer case. Which technician is correct? 4) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 5) Two technicians are discussing the front axle disconnect mechanism. Technician A says that the front axles are only disconnected if the vehicle is being towed. Technician B says that this unit is only used on all-wheel-drive vehicles. Which technician is correct? 5) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 6) Driveline wind-up on a part-time 4WD system results in all of the listed conditions EXCEPT _____ 6) _____
- A) the turning radius is different for the left and right wheels as well as the front and rear wheels
 - B) no differential action between the front and rear axles
 - C) the front wheels tend to scoot along the pavement causing a driveline vibration
 - D) low traction situations from heavy rain, mud, or snow
- 7) Technician A says that most transfer cases have a built in oil pump. Technician B says that most transfer cases use a heavy grease as a lubricant. Which technician is correct? 7) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 8) 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? 8) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 9) A transfer case contains all of the following components, EXCEPT _____. 9) _____
- A) front output shaft
 - B) shift mechanism
 - C) four drive sprockets
 - D) planetary gearset assembly
- 10) A transfer case is extremely noisy in all selections except neutral (N) whenever the vehicle is moving. Technician A says the drive chain may be stretched, causing the noise as it hits the inside of the case. Technician B says that one or more of the transfer case bearings could be defective. Which technician is correct? 10) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician