

*Electric and Hybrid Electric Vehicles, 1st Edition*

**Quiz 17B**

NAME \_\_\_\_\_

1. Technician A says that a planetary gear set has three main components. Technician B says that a planetary gear set cannot rotate backwards. Which technician is correct? 1. \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B
  
2. The electric motor in the Ford/ Lincoln 10R80 MHT transmission provides \_\_\_\_\_. 2. \_\_\_\_\_
  - A) stop-start capabilities
  - B) extra power
  - C) extra low-speed torque
  - D) All of the answers are correct
  
3. A FWD hybrid electric vehicle with an electric rear axle \_\_\_\_\_. 3. \_\_\_\_\_
  - A) has all-wheel drive capabilities
  - B) uses a special inverter
  - C) has a separate resolver and temperature sensor for the rear axle unit
  - D) All of the answers are correct
  
4. Two technicians are discussing the Ford 10R80 MHT transmission. Technician A says that an electric motor and disconnect clutch are placed between the engine and torque converter. Technician B says that the electric motor provides additional power. Which technician is correct? 4. \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B
  
5. The GM parallel hybrid truck features \_\_\_\_\_. 5. \_\_\_\_\_
  - A) stop-start capabilities
  - B) regenerative braking
  - C) full electric mode
  - D) Both answers a and b are correct
  
6. In a GM two-mode hybrid electric vehicle, when can the vehicle be powered by electric mode alone? 6. \_\_\_\_\_
  - A) During the first mode
  - B) During the second mode
  - C) During either the first or second mode
  - D) During heavy load conditions regardless of mode
  
7. Modifications to automatic transmissions used in hybrid vehicles include \_\_\_\_\_. 7. \_\_\_\_\_
  - A) electric auxiliary transmission fluid pumps
  - B) modified torque converter lockup schedule
  - C) hydraulic impulse storage accumulator
  - D) All of these answers are correct

8. Technician A says that a mild hybrid vehicle transmission contains two or three electric motors. Technician B says that mild a hybrid with stop-start usually has one electric motor. Which technician is correct? 8. \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B
9. The oil pump in the Toyota/ Lexus power-split hybrid system \_\_\_\_\_. 9. \_\_\_\_\_
- A) only turns when the ICE is operating
  - B) is located in the rear cover of the transmission behind MG2
  - C) only turns when MG2 is operating
  - D) Both answers a and b are correct
10. How many electric motor/generators does the GM 2ML70 transmission have? 10. \_\_\_\_\_
- A) two
  - B) one
  - C) three
  - D) Any of these, depending on the model year

## Answer Key

Testname: EV1\_17B

1. A  
Page Ref: 236
2. D  
Page Ref: 234-235
3. D  
Page Ref: 244
4. A  
Page Ref: 234
5. D  
Page Ref: 232-233
6. A  
Page Ref: 232
7. D  
Page Ref: 230-231
8. B  
Page Ref: 230
9. D  
Page Ref: 242
10. A  
Page Ref: 232