

Name: _____ Date: _____

1. A FWD hybrid electric vehicle with an electric rear axle:
 - 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

2. The final drive assembly in an electric vehicle transmission assembly:
 - A. Transfers torque from the electric motor to the drive wheels
 - B. Reduces motor speed to produce ideal torque at low and high speeds
 - C. Provides for a parking mechanism for the assembly
 - D. All of the answers are correct

3. What is the first step when diagnosing a hybrid vehicle transmission?
 - A. Check the fluid level
 - B. Verify the customer concern
 - C. Check for trouble codes
 - D. Check for Technical Service Bulletins (TSBs)

4. What is the role of the resolver in a hybrid vehicle's transmission system?
 - A. It provides the PCM with the speed, location, and direction of rotation of the electric motor
 - B. It acts as a torque converter
 - C. It controls the shifting mechanism
 - D. It regulates the transmission fluid temperature

5. What is the maximum RPM range for electric motors in most electric vehicles?
 - A. 5000–8000 RPM
 - B. 8000–10000 RPM
 - C. 10000–18000 RPM
 - D. 18000–20000 RPM

6. In the context of EV transmissions, what is the primary objective of the motor and drivetrain?
 - A. To maximize the vehicle's top speed
 - B. To improve the conversion rate of battery power to actual wheel power
 - C. To provide a wide range of gear ratios
 - D. To enable manual gear shifting

7. What is the typical top speed of most electric vehicles?
 - A. 80–100 MPH
 - B. 90–110 MPH
 - C. 110–125 MPH
 - D. 125–140 MPH

8. How does the Toyota power-split system deliver power to the drive wheels?
- A. Through a combination of the ICE and electric motors
 - B. Through a single electric motor
 - C. Through a traditional transmission system
 - D. Through direct drive without any gear reduction
9. What is the primary function of the electric secondary fluid pump in a GM hybrid pickup?
- A. To provide additional cooling to the transmission
 - B. To maintain fluid pressure when the ICE is off
 - C. To increase the hydraulic pressure for better torque
 - D. To filter the transmission fluid
10. What is the primary benefit of having a single-speed transmission in an electric vehicle?
- A. It allows for manual control of gear shifting
 - B. It provides a traditional driving experience
 - C. It eliminates the need for a complex transmission system
 - D. It supports regenerative braking

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Multiple Choice Quiz B

Answer Key

1. D

2. D

3. B

4. A

5. C

6. B

7. C

8. A

9. B

10. C