

Automotive Technology 7<sup>th</sup> Edition  
Chapter 87  
Multiple Choice Quiz A

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. What is the primary function of the third motor in a three-motor hybrid system?
  - A. To provide additional power to the front wheels
  - B. To drive the rear wheels
  - C. To enhance the battery charging process
  - D. To support the HVAC system
  
2. Which of the following is NOT an advantage of an electric vehicle (EV)?
  - A. Higher initial cost
  - B. Lack of required oil changes
  - C. More economical operation on a cost per mile basis
  - D. All of the above are advantages
  
3. In a series hybrid powertrain, what is the source of propulsion?
  - A. Internal combustion engine (ICE)
  - B. Electric motor
  - C. Three-speed transmission
  - D. ICE or electric motor
  
4. A full hybrid uses which combination of batteries?
  - A. A 12-volt battery and a 144-volt battery
  - B. Two 12-volt batteries
  - C. A 12-volt battery and a 42-volt battery
  - D. A 12-volt battery and a 300-volt battery
  
5. What is one-pedal driving in the context of electric vehicles?
  - A. The vehicle only has one pedal
  - B. The vehicle has the ability to slow and often stop using just the accelerator pedal
  - C. The vehicle does not use regenerative brakes but just friction brakes
  - D. The vehicle uses the accelerator pedal to accelerate and the parking brake lever to slow and stop
  
6. An electric vehicle (EV) is also referred to as a:
  - A. Self-driving vehicle
  - B. Battery electric vehicle (BEV)
  - C. Hybrid electric vehicle (HEV)
  - D. Plug-in hybrid electric vehicle (PHEV)
  
7. What affects the driving range of an electric vehicle (EV)?
  - A. Acceleration habits
  - B. Air-conditioning use
  - C. Tire pressure
  - D. All of the above

8. What is range anxiety?

- A. The fear of running out of electrical battery charge and being left stranded
- B. The fear of having to recharge on the way to work if the distance is greater than 5 miles
- C. Normal anxiety when first owning an EV
- D. Both A and C

9. What is NOT a routine maintenance requirement for an electric vehicle?

- A. Windshield washer fluid replacement
- B. Windshield wiper blades replacement
- C. Engine oil change
- D. Cabin filter replacement

10. What is the main reason for the high initial cost of electric vehicles?

- A. Cost of the high-voltage batteries
- B. Cost of the electric motors
- C. Cost of the vehicle's lightweight materials
- D. Cost of the advanced driver-assistance systems

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Answer Key

1. B

2. A

3. D

4. D

5. B

6. B

7. D

8. D

9. C

10. A