

Electric and Hybrid Electric Vehicles, 1st Edition

Quiz 10A

NAME _____

1. Lithium-ion cells can be _____. 1. _____
 - A) cylindrical cell
 - B) prismatic-hard case
 - C) prismatic-pouch type
 - D) Any of the above

2. Which type of HV battery system declines at a faster rate? 2. _____
 - A) Liquid-cooled
 - B) Air-cooled
 - C) Air-heated
 - D) All decline at the same rate.

3. The range of an electric vehicle is measured in _____. 3. _____
 - A) miles per gallon
 - B) kilowatts per hour
 - C) miles per kilowatt-hour
 - D) None of these

4. The nominal voltage of an NiMH battery cell is _____. 4. _____
 - A) 1.2 volts
 - B) 3.2 volts
 - C) 3.6 volts
 - D) 4.8 volts

5. Technician A says that a hybrid vehicle can travel about 3 to 4 miles per kilowatt-hour.. 5. _____
Technician B says that an electric vehicle can travel about 3 to 4 miles per kilowatt-hour. Which technician is correct?
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians A and B
 - D) Neither technician A nor B

6. A 12-volt system is used in both HEV and EV vehicles to _____. 6. _____
 - A) provide a source for the high voltage DC-to-DC converter
 - B) power all accessories and other aspects of vehicle operation except propulsion
 - C) Both a and b
 - D) Neither a nor b

7. A symptom of a failed HV battery in an HEV is _____. 7. _____
 - A) reduced fuel economy
 - B) engine never shuts off
 - C) DTC P0A80
 - D) All of these

8. Technician A says that most EVs use a liquid battery cooling system. Technician B says that EVs use a liquid system to heat the batteries. 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. Increased system voltage allow the motor windings to be _____. 9. _____
- A) lighter in weight
 - B) smaller in size
 - C) aluminum instead of copper
 - D) cooler
10. Technician A says that a HV battery with a bad cell module cannot be repaired. Technician B says that HV battery modules can be replaced on some vehicles. Which technician is correct? 10. _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians A and B
 - D) Neither technician A nor B

Answer Key

Testname: EV1_10A

1. D

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2. B

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3. C

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4. A

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5. B

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6. B

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7. D

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8. A

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9. B

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10. B

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