

Name \_\_\_\_\_

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

- 1) The HV battery is normally kept at a state of charge (SOC) target of \_\_\_\_\_ percent. 1) \_\_\_\_\_  
A) 80  
B) 20  
C) 100  
D) 60
  
- 2) How are the high voltage batteries cooled in an HEV? 2) \_\_\_\_\_  
A) Ice packs  
B) By circulating cabin air  
C) By forced air from under the vehicle  
D) By opening a folding roof flap
  
- 3) Which battery type is NOT being used in hybrid or electric vehicles? 3) \_\_\_\_\_  
A) Zinc air  
B) Sodium sulfur  
C) Sodium-metal-chloride (ZEBRA)  
D) All of the above
  
- 4) The high voltage battery disconnect should be pulled out before refueling an HEV. 4) \_\_\_\_\_  
A) True  
B) False
  
- 5) Normal operating state-of-charge (SOC) range for most hybrid electric vehicles is \_\_\_\_\_. 5) \_\_\_\_\_  
A) 15% to 95%  
B) 23% to 83%  
C) 46% to 56%  
D) 52% to 68%
  
- 6) What type of battery uses two different electrolytes? 6) \_\_\_\_\_  
A) Sodium-metal-chloride (ZEBRA)  
B) Potassium phosphate  
C) NiCD  
D) Lead-acid
  
- 7) Technician A says the nominal voltage for ONE lithium-ion cell is 1.2 volts. Technician B says the nominal voltage for ONE NiMH battery cell is 2.1 volts. Which technician is correct? 7) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician

- 8) Technician A says that NiMH batteries are an alkaline design. Technician B says that high-voltage battery packs are constructed using NiMH cells connected in parallel. Which technician is correct? 8) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 9) When working around high-voltage batteries, what precautions should be adhered to? 9) \_\_\_\_\_
- A) Do not work on the vehicle if moisture is present on the skin or anywhere on or near the vehicle.
  - B) Be sure to disconnect the HV battery and allow enough time for system capacitors to discharge before proceeding.
  - C) ALWAYS refer to the service manual for approved safety procedures when handling the HV battery pack.
  - D) All of the above.
- 10) The electrolyte in a nickel lithium-ion battery is \_\_\_\_\_. 10) \_\_\_\_\_
- A) H<sub>2</sub>SO<sub>4</sub>
  - B) potassium hydroxide
  - C) nickel cadmium
  - D) organic solvent

## Answer Key

Testname: AT6\_92B

1) D

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2) B

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3) D

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4) B

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5) D

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6) A

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7) D

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8) A

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9) D

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10) D

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