

Name \_\_\_\_\_

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

- 1) Each cell of an automobile 12 volt battery can produce about \_\_\_\_\_ volts. 1) \_\_\_\_\_  
A) 1.2  
B) 2.1  
C) 4.2  
D) 4
- 2) Technician A says the nominal voltage for ONE lead-acid battery cell is 1.2 volts. Technician B says the nominal voltage for ONE NiMH battery cell is 2.1 volts. Which technician is correct? 2) \_\_\_\_\_  
A) Technician A  
B) Technician B  
C) Both Technicians  
D) Neither Technician
- 3) When charging a lead-acid (flooded-type) battery, \_\_\_\_\_. 3) \_\_\_\_\_  
A) The initial charging rate should be about 35 amperes for 30 minutes  
B) The battery may not accept a charge for several hours, yet still be a good (serviceable) battery  
C) The battery temperature should not exceed 125°F (hot to the touch)  
D) All of the above
- 4) Which batteries use solid electrolytes? 4) \_\_\_\_\_  
A) Lithium-polymer  
B) Lithium-ion  
C) NiCd  
D) NiMH

5) The reading on this DVOM means that the battery is \_\_\_\_\_.

5) \_\_\_\_\_



- A) OK
- B) Overheated
- C) Low on charge
- D) Not enough information

6) What battery rating is tested at 32 deg F?

6) \_\_\_\_\_

- A) Cold-cranking amperes (CCA)
- B) Cranking amperes (CA)
- C) Reserve capacity
- D) Battery voltage test

7) Which type of battery is most used in hybrid electric vehicles?

7) \_\_\_\_\_

- A) Nickel metal hydride
- B) Lithium ion
- C) Nickel cadmium
- D) Sodium nickel chloride

8) A battery high rate discharge (load capacity) test is being performed on a 12 volt battery.

8) \_\_\_\_\_

Technician A says that a good battery should have a voltage reading of higher than 9.6 volts while under load at the end of the 15-second test. Technician B says that the battery should be discharged (loaded) to twice its CCA rating. Who is right?

- A) A only
- B) B only
- C) Both A and B
- D) Neither A nor B

9) Which battery rating is expressed in minutes?

9) \_\_\_\_\_

- A) Cold-cranking amperes
- B) Cranking amperes
- C) Reserve capacity
- D) Battery voltage test

10) What type of battery uses two different electrolytes?

10) \_\_\_\_\_

- A) Sodium-metal chloride
- B) Potassium phosphate
- C) NiCD
- D) Lead-acid

## Answer Key

Testname: AAEE\_8B

1) B

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2) D

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3) D

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4) A

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5) C

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6) B

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7) A

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8) A

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9) C

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10) A

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