

Name \_\_\_\_\_

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

- 1) A vehicle equipped with a stop/start system uses a(n) \_\_\_\_\_ battery. 1) \_\_\_\_\_
  - A) AGM
  - B) VRLA
  - C) deep cycle
  - D) EFB
  
- 2) When a battery becomes completely discharged, both positive and negative plates become \_\_\_\_\_ and the electrolyte becomes \_\_\_\_\_. 2) \_\_\_\_\_
  - A)  $H_2SO_4$ ; Pb
  - B)  $PbSO_4$ ;  $H_2O$
  - C)  $PbO_2$ ;  $H_2SO_4$
  - D)  $PbSO_4$ ;  $H_2SO_4$
  
- 3) A fully charged 12 volt battery should indicate \_\_\_\_\_. 3) \_\_\_\_\_
  - A) 12.6 volts or higher
  - B) a specific gravity of 1.265 or higher
  - C) 12 volts
  - D) Both A and B
  
- 4) Each automotive battery cell has an electrical potential of how many volts? 4) \_\_\_\_\_
  - A) 2.1 V
  - B) 1.5 V
  - C) 12.6 V
  - D) None of these
  
- 5) Which statement is true regarding the internal grids in automotive batteries? 5) \_\_\_\_\_
  - A) The grid is made mainly of lead
  - B) The lead used to make the grid is enhanced with other elements for durability
  - C) Both A and B
  - D) Neither A nor B
  
- 6) Which battery rating is tested at  $0^{\circ}F$  ( $-18^{\circ}C$ )? 6) \_\_\_\_\_
  - A) Cold-cranking amperes (CCA)
  - B) Cranking amperes (CA)
  - C) Reserve capacity
  - D) Battery voltage test
  
- 7) What makes a battery "low maintenance" or "maintenance free"? 7) \_\_\_\_\_
  - A) The material that is used to construct the grids
  - B) The plates are constructed of different metals
  - C) The electrolyte is hydrochloric acid solution
  - D) The battery plates are smaller, making more room for additional electrolytes

- 8) The positive battery plate is \_\_\_\_\_. 8) \_\_\_\_\_  
A) lead dioxide  
B) brown in color  
C) sometimes called lead peroxide  
D) All of the above
- 9) To avoid warping the battery plates charging voltage must be kept below \_\_\_\_\_ volts. 9) \_\_\_\_\_  
A) 13  
B) 12  
C) 15.5  
D) 14
- 10) Caution is advised when working around lead-acid batteries because the battery may contain \_\_\_\_\_ gas. 10) \_\_\_\_\_  
A) atmospheric  
B) hydrogen  
C) carbon  
D) lead

## Answer Key

Testname: AEEP8\_15B

1) D

Page Ref: 227

2) B

Page Ref: 225

3) D

Page Ref: 226

4) A

Page Ref: 223

5) C

Page Ref: 222

6) A

Page Ref: 228

7) A

Page Ref: 222

8) D

Page Ref: 222

9) C

Page Ref: 228

10) B

Page Ref: 225