

Name \_\_\_\_\_

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

- 1) Technician A says that electronic conductance testing can determine CCA, state-of-charge, and voltage of the battery. Technician B says that electronic conductance testing can determine if there is a bad cell, requiring battery replacement. Who is right? 1) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 2) When load testing a battery, which battery rating is normally used to determine how much load to apply to the battery? 2) \_\_\_\_\_  
A) CA  
B) RC  
C) MCA  
D) CCA
- 3) Technician A says that distilled or clean drinking water should be added to a battery when the electrolyte level is low. Technician B says that fresh electrolyte (solution of acid and water) should be added. Which technician is correct? 3) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 4) Which of these is a measure of how well a battery can create current? 4) \_\_\_\_\_  
A) Resistance  
B) Conductance  
C) Reluctance  
D) Both A and B
- 5) A battery high rate discharge (load capacity) test is being performed on a 12 volt battery. 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 a battery conductance tester is often used to load the battery to two times the CCA rating of the battery. Who is right? 5) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician

- 6) Technician A says that an AGM battery can be charged with any battery charger. Technician B says that an AGM battery requires a charger specially designed for charging AGM batteries. Who is correct? 6) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 7) Which of these is the most accurate test to determine the condition of a battery? 7) \_\_\_\_\_
- A) Open circuit voltage (OCV) test
  - B) Hydrometer test
  - C) Load or capacity test
  - D) Voltage drop test
- 8) When charging a maintenance-free (lead-calcium) battery, \_\_\_\_\_. 8) \_\_\_\_\_
- 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
- 9) Vehicles equipped with diesel engines may have two batteries connected in parallel in order to provide additional current at the same voltage. Technician A says to successfully test the batteries, they should be disconnected and tested separately. Technician B says that a fault in one battery has NO effect on the other battery. Who is right? 9) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 10) Many vehicle manufacturers recommend that a special electrical connector be installed between the battery and the battery cable when testing for \_\_\_\_\_. 10) \_\_\_\_\_
- A) battery drain (parasitic drain)
  - B) specific gravity
  - C) battery voltage
  - D) battery charge rate