

Name _____

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

- 1) What is required to fully charge the HV battery on a plug-in hybrid vehicle? 1) _____
 - A) A trip of at least 225 miles
 - B) The ICE must run for more than 45 minutes.
 - C) The vehicle must be plugged in to be fully charged.
 - D) The vehicle must be plugged in for at least 24 hours.

- 2) Which type of vehicle is considered to be a ZEV? 2) _____
 - A) An electric vehicle (EV)
 - B) A plug-in electric vehicle (PHEV)
 - C) A hybrid electric vehicle (HEV)
 - D) All of the above

- 3) Two technicians are discussing a plug-in hybrid vehicle. Technician A says that the plug-in version operates the same as the normal standard hybrid version. Technician B says that the plug-in hybrid uses a smaller, lighter battery pack. Which technician is correct? 3) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 4) Why does warm weather decrease the range of an electric vehicle? 4) _____
 - A) Batteries do not function well at high temperatures.
 - B) Batteries have to supply the power needed to keep the interior of the vehicle cool.
 - C) Batteries must supply power to help keep the batteries themselves cool.
 - D) All of the above

- 5) An electric vehicle has a battery capacity of 20 kWh. What is its estimated range? 5) _____
 - A) 20 miles
 - B) 8 miles
 - C) 12 miles
 - D) 80 miles

- 6) During the summer months the range of a Nissan Leaf is less than in the winter. What could be the problem? 6) _____
 - A) The hot road surfaces create more drag on the special tires.
 - B) Hot air is thicker than cold air, causing drag.
 - C) High temperatures increase the resistance of the charging cable.
 - D) This is a normal condition.

- 7) The standard charging station plug is usually what SAE standard? 7) _____
 - A) J1777
 - B) J1772
 - C) J1930
 - D) J1427

- 8) The storage capacity of HV batteries are rated in _____. 8) _____
- A) Volts
 - B) Li-Ion
 - C) kWh
 - D) Watts
- 9) Electric and plug-in hybrid vehicles are supplied with a Level 1 charging cable that operates at _____ volts. 9) _____
- A) 110
 - B) 245
 - C) 220
 - D) 13.8
- 10) Which of these EV charging stations is the most expensive to install? 10) _____
- A) Level 3
 - B) Level 1
 - C) Level 2
 - D) Home Level 1