

Name _____

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

- 1) Technician A says that a major limitation of electric vehicles is their short range. Technician B says that a major advantage of electric vehicles is their quiet operation. Which technician is correct? 1) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 2) Some HEVs can operate using the electric motor alone or with the assist of the internal combustion engine. 2) _____
 - A) True
 - B) False

- 3) Which type of hybrid electric design costs the least? 3) _____
 - A) Strong hybrid design
 - B) Series hybrid design
 - C) Parallel hybrid design
 - D) BAS design

- 4) What makes the BAS system attractive for buyers? 4) _____
 - A) Lowest cost of all the hybrid systems
 - B) Moderate increase in fuel economy versus conventional gasoline powered vehicles
 - C) Both A and B
 - D) Neither A nor B

- 5) Which of these statements about series hybrid electric vehicles is (are) true? 5) _____
 - A) The internal combustion engine turns a generator to charge the battery
 - B) The engine never powers the vehicle directly
 - C) Both A and B
 - D) Neither A nor B

- 6) About how fast does a motor-generator crank the internal combustion engine? 6) _____
 - A) About 1000 RPM
 - B) About 2000 RPM
 - C) About 150-300 RPM
 - D) About 350-600 RPM

- 7) Technician A says that full hybrid electric vehicles need to be plugged into a standard AC electrical outlet to charge. Technician B says that the high voltage battery in an HEV uses a generator driven by the internal combustion engine for recharging. Which technician is correct? 7) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 8) Electric motors are better than an internal combustion engine to propel a vehicle because _____ 8) _____
- A) They produce high torque at low speeds
 - B) They do not burn fuel and therefore do not release carbon dioxide into the environment
 - C) They are quiet
 - D) All of the above are correct
- 9) Which type hybrid uses 36 to 42 volts? 9) _____
- A) Mild hybrid
 - B) Medium hybrid
 - C) Full hybrid
 - D) Strong hybrid
- 10) Which of these is NOT an advantage of a series hybrid design? 10) _____
- A) Smaller internal combustion engine
 - B) A single-speed gearbox can be used
 - C) No transmission is necessary
 - D) All of these are advantages of the series hybrid design

Answer Key

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1) C

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2) A

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3) D

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4) C

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5) C

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6) A

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7) B

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8) D

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9) A

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10) D

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