

Name \_\_\_\_\_

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

- 1) The neutral safety switch is located \_\_\_\_\_. 1) \_\_\_\_\_
  - A) Between the starter solenoid and the starter motor
  - B) Inside the ignition switch itself
  - C) Between the ignition switch and the starter solenoid
  - D) In the battery cable between the battery and the starter solenoid
  
- 2) Which safety device is used on vehicles with manual transmissions? 2) \_\_\_\_\_
  - A) Clutch safety switch
  - B) Neutral safety switch
  - C) Both A and B
  - D) Neither A nor B
  
- 3) The faster a starter motor rotates \_\_\_\_\_. 3) \_\_\_\_\_
  - A) The more current it draws from the battery
  - B) The less CEMF is generated
  - C) The less current it draws from the battery
  - D) The greater the amount of torque produced
  
- 4) Which brushes are not insulated? 4) \_\_\_\_\_
  - A) Ground
  - B) Power
  - C) No brushes are insulated
  - D) None of these
  
- 5) Permanent magnets are normally used for what part of the starter? 5) \_\_\_\_\_
  - A) The armature
  - B) The solenoid
  - C) The field coils
  - D) The commutator
  
- 6) The overrunning clutch (starter drive) accomplishes which of the following? 6) \_\_\_\_\_
  - A) Separates the starter motor from the starter solenoid
  - B) Brings the starter motor into contact with the ignition circuit
  - C) Lets the starter motor rotate in either direction
  - D) Protects the starter motor from spinning too rapidly
  
- 7) How many brushes are typically used in the automotive starter? 7) \_\_\_\_\_
  - A) 4
  - B) 2
  - C) 8
  - D) None of these

- 8) The starter motor can produce up to \_\_\_\_\_ horsepower. 8) \_\_\_\_\_
- A) 8
  - B) 5
  - C) 20
  - D) None of these
- 9) Technician A says that the starter control circuit includes the ignition switch, neutral safety (clutch) switch, and solenoid. Technician B says that the power circuit includes the battery, battery cables, solenoid, and starter motor. Who is right? 9) \_\_\_\_\_
- A) A only
  - B) B only
  - C) Both A and B
  - D) Neither A nor B
- 10) The brushes are used to transfer electrical power between \_\_\_\_\_. 10) \_\_\_\_\_
- A) Field coils and the armature
  - B) The commutator and the segments
  - C) The solenoid and the field coils
  - D) The armature and the solenoid

## Answer Key

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1) C

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2) A

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3) C

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4) A

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5) C

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6) D

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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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