

Automotive Electrical and Engine Performance 9th Edition
Chapter 21 – Body Electrical Accessories
Multiple Choice Questions Quiz B

1. What is the primary purpose of the Body Control Module (BCM) in a modern vehicle's electrical system?
 - a. To operate the engine's fuel injection system
 - b. To control lighting, wipers, and other accessory functions
 - c. To monitor and control engine temperatures
 - d. To manage the transmission shift points

2. How do modern horns generate sound?
 - a. By vibrating a diaphragm through rapid armature circuit switching
 - b. By rotating a small motor to produce oscillations
 - c. By emitting a controlled AC ripple through the speaker system
 - d. By using pressurized air directed through a trumpet mechanism

3. What is the purpose of the rain-sense module in windshield wipers?
 - a. To detect water and adjust the wiper speed accordingly
 - b. To provide fixed intervals for intermittent wiping
 - c. To disable wipers during low-speed driving
 - d. To synchronize wiper movements with headlight operation

4. In vehicles with computer-controlled windshield wipers, what input is necessary for the wipers to function properly?
 - a. Brake switch signal
 - b. Alternator voltage output
 - c. Driver command through the combination switch
 - d. Coolant temperature

5. How is the blower motor speed adjusted in a traditional system?
- a. By changing the resistance in the motor windings
 - b. Through a series of resistors in the blower motor resistor pack
 - c. Using a potentiometer to vary motor current directly
 - d. By applying high-frequency pulses to the motor terminals
6. What is the function of the park switch in windshield wipers?
- a. To shut off the wipers as soon as they reach the driver's selected position
 - b. To control the wiper relay during high-speed operation
 - c. To ensure the wipers stop at a defined park position on the windshield
 - d. To reset the wiper motor after each cycle
7. What diagnostic tool is commonly used to troubleshoot faulty horns in vehicles equipped with BCM-controlled systems?
- a. Analog multimeter
 - b. Oscilloscope
 - c. Frequency counter
 - d. Bidirectional scan tool
8. What key feature differentiates variable-delay wipers from older wiper systems?
- a. Use of a mechanical timer to control the interval
 - b. Use of the BCM and capacitive sensing for interval adjustment
 - c. Integration with the rain-sense module for real-time delay adjustment
 - d. Increased wiper motor resistance for energy efficiency

9. Which of the following is NOT a component of a rear defogger system?

- a. Heating elements baked onto the glass
- b. Timer relay
- c. Driver-operated control switch
- d. Dedicated alternator circuit

10. What safety feature is mandated by law for power windows to prevent injury?

- a. Child safety locks on all switches
- b. Automatic reversal systems (ARS) to retract upon obstruction
- c. Limit switches for precise control
- d. Low-voltage operation mode

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Answer Key Quiz B

Correct Answers:

1. b
2. a
3. a
4. c
5. b
6. c
7. d
8. c
9. d
10. b