

Automotive Electrical and Engine Performance 9th Edition
Chapter 18 – Driver Information and Navigation Systems
Multiple Choice Questions Quiz A

1. What does the "amber warning symbol" on a vehicle's dashboard indicate?
 - a) A function that is actively in use
 - b) A situation requiring immediate action
 - c) A minor fault needing attention soon
 - d) An informational notification only

2. What is the purpose of the bulb test performed when the ignition is first turned on?
 - a) To ensure the lights are at maximum brightness
 - b) To identify which warning lights are inactive or burned out
 - c) To check the battery charge level
 - d) To alert the driver of maintenance requirements

3. In a vehicle's head-up display (HUD) system, where is the data usually projected?
 - a) On the rearview mirror
 - b) Directly in front of the driver on the dashboard
 - c) Onto the windshield
 - d) On the instrument panel cluster

4. What technology do night vision systems in vehicles commonly use to display images in low-light conditions?
 - a) LED lighting
 - b) Optical sensors for visible light
 - c) Infrared or thermal imaging cameras
 - d) Daytime running lights

5. What feature do steering wheel controls provide in modern vehicles?
- a) Control over the headlight brightness
 - b) Adjustment of tire pressure
 - c) Operation of audio, cruise control, and HVAC settings
 - d) Manual override of the gear selector
6. What type of memory is used in digital odometers to retain mileage information when the battery is disconnected?
- a) EEPROM
 - b) Dynamic RAM (DRAM)
 - c) SDRAM
 - d) Cache memory
7. A capacitive touchscreen in a vehicle detects user input through changes in what property?
- a) Electrical current
 - b) Capacitance
 - c) Pressure
 - d) Magnetic field strength
8. How is the electronic speedometer signal typically generated?
- a) Through mechanical gears connected to the wheels
 - b) Using a permanent magnet generator that varies AC voltage
 - c) By a digital input from the vehicle's telematics system
 - d) From the steering wheel angle sensor
9. Which navigation system component helps determine the vehicle's movement around its vertical axis?
- a) Yaw sensor
 - b) GPS antenna
 - c) Vehicle speed sensor
 - d) Instrument panel display

10. Which telematics function assists with emergency response by automatically alerting a command center after a collision?

- a) Real-time traffic alerts
- b) Route optimization
- c) Vehicle tracking for stolen vehicles
- d) Collision notification and location tracking

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Answer Key Quiz A

Correct Answers:

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