

Electric and Hybrid Electric Vehicles, 1st Edition

Quiz 18A

NAME _____

1. LIDAR systems are capable of _____.
A) creating 3-D images at 300 yards
B) recognizing an object
C) measuring distance, location, and speed
D) All of the above
1. _____

2. Self-parking vehicles use _____ and control the _____ to control the vehicle into a parking space.
A) radar; throttle
B) camera; electric power steering
C) sonic sensor; brakes
D) radar; electric power steering
2. _____

3. Lane keep assist uses a camera that is mounted _____.
A) below the front bumper
B) in front of the inside rearview mirror
C) in the inside rearview mirror
D) in either outside rearview mirror
3. _____

4. Rear cross-traffic alert is used to warn the driver when backing out from a parking space if there is a vehicle approaching from either side. The system uses _____ installed on both sides of the vehicle near the rear bumper.
A) sonar
B) ultrasonic
C) radar
D) cameras
4. _____

5. Lane departure warning systems uses cameras to watch _____.
A) speed bumps approaching
B) lane marking lines
C) median grass
D) road shoulders
5. _____

6. Technician A says that adaptive cruise control allows hands-free driving. Technician B says that the adaptive cruise control system operates at all speeds. Which technician is correct?
A) Technician A only
B) Technician B only
C) Both technicians A and B
D) Neither technician A nor B
6. _____

7. Calibrating radar and cameras involves all of the following EXCEPT _____.
A) factory or factory-level scan tool
B) special targets set at precisely specified location around the vehicle
C) both static (stationary and dynamic (moving) calibration is required
D) driving the vehicle in a circle 10 times to calibrate the cameras
7. _____

8. ADAS calibration may include the use of _____. 8. _____
- A) lines on the floor
 - B) targets
 - C) folded window covers
 - D) Either a or b
9. Dedicated short-range communication (DSRC) systems are capable of _____. 9. _____
- A) creating 3-D images at 300 yards
 - B) recognizing an object
 - C) measuring distance, location, and speed
 - D) transmitting messages in milliseconds
10. The purpose of lane keep assist (LKA) is _____. 10. _____
- A) to warn the driver if moving out of a lane
 - B) used with adaptive cruise control to self-drive the vehicle without driver input or control
 - C) to keep the vehicle within the lane, using the electric power steering
 - D) Both a and c

Answer Key

Testname: EV1_18A

1. D
Page Ref: 260-261
2. B
Page Ref: 395
3. B
Page Ref: 255
4. C
Page Ref: 398
5. B
Page Ref: 254
6. D
Page Ref: 255
7. D
Page Ref: 400-401
8. D
Page Ref: 261
9. D
Page Ref: 265
10. D
Page Ref: 395