



Lesson 2: Practice Quiz

Practice Quiz, 5 questions

5/5 points (100.00%)

✓ **Congratulations! You passed!**

Next Item



1. Which of the following tasks are associated with perception? (Select all that apply)

1 / 1
point



Estimating the motion of other vehicles



Correct

Correct, perception deals with position and motion estimation.



Planning routes on a map



Un-selected is correct



Identifying road signs



Correct

Correct, perception deals with object identification.



Responding to traffic light state changes



Un-selected is correct



2. Which of the following can be on road objects? (Select all that apply)

1 / 1
point



Sidewalks



Un-selected is correct

☐ Stop signs



Un-selected is correct

☒ Vehicles



Correct

Correct, vehicles can be on road objects. They can also be off road.

☒ Potholes



Correct

Correct, potholes in the drivable surface are on road objects.



1 / 1
point

3. Which of the following tasks pose challenges to perception? (Select all that apply)

☒ Having sensors work in adverse weather conditions



Correct

☒ Handling sensor occlusion and reflection



Correct

☒ Detecting, tracking and predicting dynamic object motions



Correct

☒ Handling sensor uncertainty



Correct



1 / 1
point

4. Which of the following sensors are used for ego localization? (Select all that apply)

☐

Barometers



Un-selected is correct

☒

Inertial Measurement Unit (IMU)



Correct

Correct, an IMU provide acceleration and rotation rate measurements from accelerometers and gyroscopes, and can be used to estimate vehicle orientation and aid in localization in general.

☒

Global Navigation Satellite System (GNSS)



Correct

Correct, a GNSS sensor provides position and velocity measurements, and can be used to estimate vehicle position and orientation for localization.

☐

Radar



Un-selected is correct



1 / 1
point

5. Which of the following objects would be relevant for perception in adaptive cruise control?

☒

Other vehicles



Correct

Correct, adaptive cruise control detects vehicles ahead to control speed and to maintain safe driving distances.

☐

Road signs

☐

Traffic lights

☐

Lane markings

