THE QUESTIONS BELOW ARE SINGLE ANSWER QUESTIONS.

What are the two main pillars of self-driving technology?

€ Lidar and Radar

€ It can drive anytime and anywhere

€ Artificial intelligence & capability to see everything

€ Information from high fidelity maps and the car's sensors

€ None of the above

Which of the following is a localization function?

€ Determining the location of cars around you

€ Planning the car's route

€ Using sensor input to avoid obstacles

€ Determining how far the car has traveled

Localization is based on GPS. What happens if the GPS information is somewhat inaccurate?

€ Nothing. The GPS data might be slightly off but they are combined with sensor data to
        increase accuracy.

€ I need to turn off self-driving mode.

How does the vehicle "see" its environment?

€ Lidar is the most important sensor. Radar and camera are just for certain
        situations.

€   It doesn't need to see, it has GPS information

€   Sensors like Lidar, radar and camera provide different types of information for the perception of the vehicle.

€   None of the above

The Lidar bounces a laser off an object at an extremely high rate and measures how long it takes to reflect off that surface.
This generates a

€   correct estimate of the velocity of objects

€   3D map of the car's surroundings

€   Scene interpretation

€   None of the above

When the GPS system of an autonomous vehicle fails, how much time is available to the operator before reacting?

€   No more than 5 seconds

€   No more than 15 seconds

€   No need to react, since the vehicle will auto correct

€   No need to react, but take the vehicle to a licensed workshop in 48 hours

THE QUESTIONS BELOW ARE MULTIPLE ANSWER QUESTIONS. SELECT ALL THE TRUE STATEMENTS.

When the autonomous car <u>begins</u> to exhibit erroneous behavior:

€   **I should prepare to take over control by placing hands on steering wheel and foot on brake pedal**

€   **I should immediately stop the autonomous system and pull over.**

€   **Remain observant; the vehicle will most probably self-correct immediately.**

€   **Call Emergency Services.**

The autonomous system is likely to fail in the following sets of conditions (select all that are true):

€   **(Heavy Rain + Sunset + Heavy Traffic)**

€   **(Dysfunctional Traffic Light + Faded Lane Markings + Bad Weather)**

€   **(Pedestrian Crossing + Tailgating car + Stop Sign)**

€   **(Multiple Lane markings + Speeding car on adjoining lane)**