Student´s task sheet   **TOPIC: Autonomous Vehicles**

PART TWO	Information Technology Technical Question	3 mins

In this part of the exam, you will talk about **Autonomous Vehicles.** The following ideas will help you.

- What technologies are used in autonomous vehicles (e.g., Radar, cameras, sensors)?
- What are the **advantages and disadvantages** of autonomous vehicles?
- Would you use an autonomous Vehicle?
- When do you think autonomous vehicles will be widely available?

2A

2B

INTERLOCUTOR´S TASK SHEET   **TOPIC: Autonomous Vehicles**

PART TWO	Information Technology Technical Question	3 mins

In this part of the exam, you will talk about **Autonomous Vehicles.** The following ideas will help you.

- What technologies are used in autonomous vehicles (e.g., Radar, cameras, sensors)?
    - **Lidar (Light Detection and Ranging):** Uses laser pulses to create a detailed 3D map of the environment.
    - **Radar** (Radio Detection and Ranging): Utilizes radio waves to detect position and speed.
    - **Cameras**: Capture visual information to identify road signs, traffic lights, lane markings.
    - objects at close range.
    - **Artificial Intelligence (AI) and Machine Learning**
    - **GPS and High-Definition Mapping:** Provide precise location data and detailed maps.
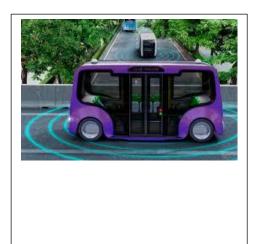- What are the advantages and disadvantages of autonomous vehicles?

Advantages:
    - **Reduced Traffic Congestion:** Optimized driving patterns can ease traffic flow.
    - **Increased Safety:** Minimize human errors, which are a common cause of accidents.
    - **More Free Time:** Passengers can use travel time productively.
    - **Lower Transportation Costs**: Potentially reduce the need for personal car ownership.
    - **Environmental Benefits**: Reduce carbon emissions.

Disadvantages:
    - **Handling Unpredictable Situations**: Struggle with sudden weather changes.
    - **High Production Costs**: Advanced technology makes these vehicles expensive.
    - **Dependence on Technology**: Failures in technology could lead to accidents.
    - **Job Losses:** Could impact employment in driving-related industries.
    - **Privacy and Security Concerns:** Risks of hacking and misuse of personal data
- Would you use an autonomous vehicle?
- When do you think autonomous vehicles will be widely available?

2A

2B