19AUO320 RECENT TRENDS IN AUTOMOBILE

UNIT 1 - Driver Support System

- Driver Support Systems are a suite of technologies aimed at aiding and enhancing the driving experience by providing assistance and safety features.

- The systems utilize sensors, cameras, and advanced algorithms to offer functionalities such as lane-keeping assistance, adaptive cruise control, automatic emergency braking, and parking assistance.

- By constantly monitoring the vehicle's surroundings, these systems contribute to accident prevention and improve overall road safety

Driver Information system

- Driver Support Systems play a crucial role in providing valuable information and shaping driver perception for a safer driving experience.

- These systems leverage various technologies to enhance driver awareness and responsiveness.

- Advanced sensors, cameras, and connectivity enable real-time data collection, offering drivers information about their surroundings, traffic conditions, and potential hazards.

- Visual and auditory cues, (GPRS) displayed on instrument clusters or heads-up displays, keep drivers informed about navigation, speed, and vehicle status

- Driver Support Systems contribute to driver perception by assisting in critical decision-making moments.

- For example, lane departure warnings and collision avoidance systems alert drivers to potential dangers, reducing the risk of accidents caused by human error or distraction.

- Adaptive cruise control adjusts the vehicle's speed based on surrounding traffic, providing a more controlled and comfortable driving experience