

Task-2



IT in Automobiles

Information Technology has revolutionized the automobile industry by transforming vehicles into smarter, safer, and more connected machines. IT enables features like GPS navigation, advanced driver assistance systems (ADAS), and real-time traffic updates, improving both convenience and safety. In addition, the rise of electric vehicles (EVs) and autonomous cars heavily relies on IT for battery management, AI-driven self-driving capabilities, and predictive maintenance. With technologies like IoT and 5G, vehicles now communicate seamlessly with one another and with infrastructure, paving the way for smarter mobility solutions.



IT in Metro Rail

IT forms the backbone of modern metro rail systems, ensuring efficient and reliable transportation. It powers smart ticketing solutions like contactless cards and QR codes, making commuting hassle-free. Furthermore, IT enables real-time tracking of trains, predictive maintenance of equipment, and optimized scheduling for improved efficiency. Advanced systems like automated train operations (ATO) and signaling reduce human errors and enhance safety. With growing urbanization, IT in metro rails is critical for building sustainable and smart cities.



IT in Avionics

In the world of avionics, IT ensures smooth, safe, and efficient air travel. It supports critical functions such as flight navigation, autopilot systems, and real-time communication between pilots and air traffic controllers. The integration of IT in avionics has also led to predictive maintenance and fuel efficiency, reducing operational costs for airlines. With advancements in cybersecurity, passenger data and sensitive flight systems are kept secure. As aviation technology continues to advance, IT plays an ever-growing role in creating