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(57) Abstract :
The automated electric cycle presented herein offers a sustainable and accessible mode of transportation, particularly tailored for individuals with physical disabilities. Integrating a brushless DC motor, rechargeable battery pack, and intuitive controller system, this electric cycle ensures efficient propulsion and customizable speed control. The ergonomic design features a stable tricycle configuration with adjustable seating, prioritizing user comfort and safety. Safety mechanisms, including regenerative braking and speed-limiting features, enhance the overall riding experience. With a focus on energy efficiency and environmental sustainability, the electric cycle minimizes reliance on petrol-based vehicles, thereby reducing carbon emissions and pollution. Its versatility allows for customization to accommodate various user needs and preferences. In summary, the automated electric cycle represents a significant advancement in transportation technology, offering an eco-friendly and inclusive solution for individuals with physical disabilities.
Accompanied Drawing [FIG. 1-6]

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