NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY

(Department of Electronics & Communication)

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Internal Guide:- Mr. Malhar Chauhan **External Guide :- Mr. Pratik parmar**

Project Title:-"A Robot control through human mind "

Abstract:- This project discussed about a brain robot based on Brain–computer interfaces (BCI<neurosky mindwave>). BCIs are systems that can bypass conventional channels of communication (i.e., muscles and thoughts) to provide direct communication and control between the human brain and physical devices by translating different patterns of brain activity into commands in real time. With these commands a robot can be controlled. The intention of the project work is to develop a robot that can assist the disabled people in their daily life to do some work independent on others and help of the international company.

- **Block /circuit Diagram:-**

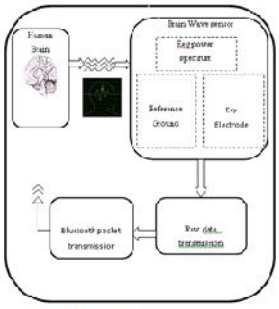

Fig a: Brain computer interface section

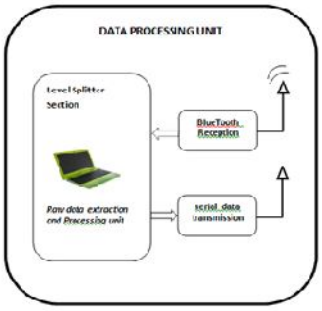

Fig b: Data processing unit

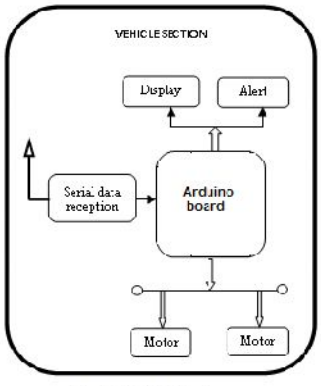

Fig c: Robot (Vehicle) section

- **Major Hardware components used:-**
  (1)Neurosky mindwave,
  (2) Arduino board(resistor,capacitor,7805 ic,ATmega8controller,reset button,interpritor,crystal circuit,led,L293D IC),
  (3)Battery.

- **Software used:-Arduino software, processing softwer.**

- **Project Application:-**
  (1)mechanical arm
  (2)wheel chair
  (3)motor speed control
  (4)light intensity control
  (5)music play based on mind state
  (6) mind gaming
  (7)handicap people

- **Approx. Project Cost:-22,000 rs**

- **Project Photo:-**