VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELGAUM-590014

Project Report on

"BABY INCUBATOR"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

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ABSTRACT

In our project, the temperature of a closed environment, like an incubator, is maintained constant over a known range using a micro controller based circuit. The microcontroller holds the reference temperature and also sensed temperature in its memory separately. The surrounding temperature is acquired using a temperature sensor and it is controlled by means of a PWM through a MOSFET, driven by 220 volts AC supply. The microcontroller compares the acquired temperature with the standard value and then either increases or decreases the temperature accordingly. A heat controlling system is used to cool the chamber. If the external temperature is higher than the standard temperature then a Peltier device is used to reduce the temperature, which works on the principle of Peltier effect. If the external temperature is lesser than the standard temperature then heating coil is used to increase the temperature. Thus chamber temperature is monitored and maintained constant.