VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–

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A MICRO PROJECT REPORT ON
"Efficient Power Manager Project"

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CERTIFICATE

This is to certify that the Micro-Project entitled **"Efficient Power Manager Project"** has been Successfully Completed by

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The bonafide students of **Department of Basic Sciences, Alva's Institute of Engineering and Technology,** affiliated to VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI, during the academic year 2020–2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.

Dr. Ramaprasad A.T
Mini Project Guide

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ABSTRACT

The technology is designed to use the least amount of energy possible by keeping track of the number of people in the space. When someone enters the room, the electric loads are turned on, and they are turned off when no one is present. In order to accomplish this, the system employs Infrared Sensor pairs, which saves a significant amount of energy. Each pair consists of two sensor pairs set in opposing directions at a certain distance from one another. The IR transmitter sends infrared rays directly to the receiver, which receives the signal and passes it to an 8051 microcontroller. The IR sensor module detects when a person enters the room and sends this information to the microcontroller. This input is processed by the microcontroller, which then turns on the load. The system also counts the number of persons present at this time and increments a counter with each arrival; this count is displayed on a 7-segment display. The sensor detects no presence when the last person leaves the room and so turns off the load/lamp. To demonstrate as a burden, a tiny lamp is employed.