VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI–590 018

A MICRO PROJECT REPORT ON

"Automatic Smoke Detector Alarm"

Submitted By,

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CERTIFICATE

This is to certify that the Micro-Project entitled **"Automatic Smoke Detector Alarm"** 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.

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ABSTRACT

In the event of a fire at home or at work, the interior components of the building are filled with smoke. This smoke layer gradually thickens to the point that visibility is greatly reduced. We can utilise this information to create a basic smoke detector alarm that will alert the residents in the area of the fire. Because it does not use expensive smoke detecting sensors, the Automatic Smoke Detector Alarm is quite small. It is equipped with a pair of infrared sensors that continuously monitor visibility in the area where they are installed. If a fire breaks out, smoke is produced and spreads over the area. When smoke enters the smoke detector module, the infrared sensors' sight is obscured. A fire alarm is triggered in the detector module as a result of this. Residents in and near the premises might be alerted to the fire and evacuate the area by hearing this alarm. The alarm will continue to ring until the smoke has dissipated, and then it will turn off. The principle behind working of this project is of the opaqueness property of smoke. In case when there is no smoke the infrared sensors are continuously in view of each other. Once smoke comes in the view, the sensor signal is obstructed and the output of the sensor changes. This change is sensed by the system to ring an alarm to notify the residents in and around the premises about the fire breakout.