VISVESVARAYA TECHNOLOGICAL UNIVERSITY,

BELAGAVI

A PROJECT REPORT ON

"SMART AGRICULTURE USING IoT"

Submitted in partial fulfillment for the award of Degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE &ENGINEERING

By

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CERTIFICATE

This is to certify that the project entitled **"SMART AGRICULTURE USING IoT"** has been successfully completed by

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the bonafide students of **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2018–2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Smart Agriculture is an approach to re-orient the practice of Agriculture. According to the survey made, the existing systems of Smart Agriculture has gaps on the communication side such as communication error due to unavoidable disconnections of Wi-Fi module. The existing system get the power supply from external sockets. Thus, need of rechargeable source of energy to controllers and the sensors is lacking in the existing IoT system. Existence of faulty sensors in deployed sensors aggregating faulty data is another problem that needs to be solved. The proposed system is focused on solving the three parameters as defines using open source tools such as Arduino and WAMPP. A fault detection algorithm has been implemented in the proposed work. The results from the proposed system eliminates the faulty sensors and alerting the user regarding those sensors, implementing GSM module for the communication error and using solar panel and AAA batteries for an alternative source of rechargeable source of energy.