VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010

PROJECT REPORT ON

"AUTONOMOUS SEEDING AND SPRAYING SPIDER ROBOT"

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

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

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CERTIFICATE

Certified that the project work entitled "**Autonomous Seeding and Spraying Spider Robot**" is a bonafide work carried out by

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in partial fulfillment for the award of BACHELOR of ENGINEERING in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2017–2018. 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.

23.5.18	23.05.18	
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ABSTRACT

Automation in agriculture is of foremost importance now a days. Labour problems have made the agricultural field less productive, thus hindering the production of food grade and commercial produces.Introduction of robotics in agriculture opens a huge opportunities along with many challenges also. Many countries are employing robots in agriculture for greater reliability and control.As compared to a factory floor which is even (flat), and more or less most factory installations are similar in basic structure like enclosed environment, less natural exposure, limited movements, etc. Whereas, in agriculture, each and every farm poses a different set of challenges like soil type, uneven surface, wet and slippery ground, moisture and dust, non availability of a constant power supply etc.

Module proposes a new simpler framework for an autonomous seeding robot with legs instead of wheels. Wheels are not suited for an uneven, wet and slippery ground, so spider like legs are provided in this design. Also features like drilling the ground and spraying the seeds in to the hole are also provided. Robot currently handles crops which grow by seeds, not as a sprout. Also the setup needs a layer of mud to be spread for drilling and seeding on the floor. The robot for agriculture purpose an agrobot is a concept for the near the performance and cost of the product once optimized, will prove to be work through in the agricultural spraying operations. Successful in constructing robot which can be travelled on rough surfaces.