VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010

PROJECT REPORT ON

"Rescue System for Borewell Accidents"

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 "Rescue System for Borewell Accidents" is a bona fide 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 2016–2017. 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

Water well or borewell is an excavation or structure created in the ground by digging, driving, boring, or drilling to access groundwater in underground aquifers. The well water is drawn by a pump, or using containers, such as buckets, that are raised mechanically or by hand. Now a day's its quiet often to see unused borewell left open after use. These wells become the death pit for those small kids who unaware of their depth play near these wells.

Rescue of children trapped inside the borewell is not only difficult but also risky task. The rescue teams spend hours and sometime days in futile attempts to save these little kids. A lot of money is also required for this rescue operation. Hence there is a need to use a technology for upgrading the rescue operation.

The rescue robot not only rescues a trapped victim from borewell but also deals with safe handling of the victim. The robot is light in weight that goes inside the borewell and holds the victim systematically. This robot consist temperature sensor, gas sensor, zigbee, LCD board, arduino board, safety air balloon, artificial arm. The rescue robot uses artificial arm that rotates in 360 degree so that the victim can be removed safely with less injury caused to the victim. The use of safety air balloon makes the robot more safe and smart. The value of the temperature sensor and gas sensor is displayed on the LCD which is present on the receiver side. The artificial arm is controlled using remote controller.