VISVESVARAYA TECHNOLOGICAL UNIVERSITY,

BELAGAVI – 590 018

Hydrogen Gas Sensor Circuit Built with an Arduino

Submitted as Microcontroller and Embedded System assignment work

BY

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ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY MIJAR, MOODBIDRI D.K. -574225 KARNATAKA

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that, assignment work for the subject "**MICROCONTROLLER AND EMBEDDED SYSTEM "** has been successfully completed and the report submitted by **Aditya V Sreenivas(4AL21CS010)** during the academic year 2022–2023. It is certified that all corrections/suggestions indicated the presentation session have been incorporated in the report and score 9 Marks out of 10 and deposited in the departmental library.

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This is to certify that, assignment work for the subject "**MICROCONTROLLER AND EMBEDDED SYSTEM "** has been successfully completed and the report submitted by **Likhith TS(4AL21CS061)** during the academic year 2022–2023. It is certified that all corrections/suggestions indicated the presentation session have been incorporated in the report and score 9 Marks out of 10 and deposited in the departmental library.

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1.Introduction

Hydrogen gas (H_2), at room temperature and under standard pressure conditions, is tasteless, odorless, and colorless.

Hydrogen gas is receiving very special attention now because hydrogen is being used as an alternative energy source to operate certain new automobiles coming out in the auto industry now. The chemical energy of hydrogen is converted by a combustion method similar to current engines or in a fuel cell which produces water and electricity by reacting hydrogen with oxygen. Engineers and car manufacturers are researching the possibility of using hydrogen gas as a viable car fuel.

The hydrogen gas sensor we will use is the MQ-8 sensor. This is a sensor that is sensitive to effects of hydrogen gas.

2.Components Needed:

- MQ-8 Hydrogen Gas Sensor
- Arduino
- LED

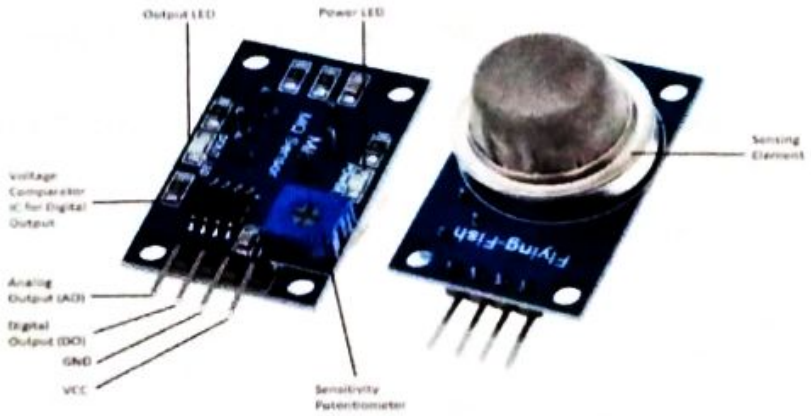

Fig 2.1:MQ-8 Hydrogen Gas Senso