**A Technical Seminar Report On**

**“AQUA COMMUNICATION”**

**Submitted to**

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, ANANTHAPUR

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

## BACHELOR OF TECHNOLOGY IN

**COMPUTER SCIENCE AND ENGINEERING**

**Submitted by**

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**Certificate**

*This is to certify that the Seminar report entitled*

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*is the bonafide work carried out by*

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*This Work has been carried Out Under My guidance.*

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**PREFACE**

I have made this report on the topic “**AQUA COMMUNICATION”;** I have tried my best to elucidate all the relevant detail to the topic to be included in the report. While in the beginning I have tried to give a general view about this topic.

My efforts and wholehearted co-corporation of each and every one has ended on a successful note. I express my sincere gratitude to guides **Ms. K. Susmitha,** who assisting me throughout the preparation of this topic. I thank her for providing me the reinforcement, confidence and most importantly the track for the topic whenever I needed it.

**ABSTRACT**

While wireless communication technology today has become part of our daily life, the idea of wireless under sea communications may still seem far-fetched. However, research has been active for over a decade on designing the methods for wireless information transmission underwater. Significant progress has been made in terrestrial sensor net-works to revolutionize sensing and data collection. To bring the concept of long lived, dense sensor networks to the underwater environment, there is a compelling need to develop low cost and low-power acoustic modems for short-range communications.

This paper explains about Aqua communication using modem and presents designing and developing such a modem. The word "modem" is a contraction of the words modulator-demodulator. A modem is typically used to send digital data over a phoneline. The sending modem modulates the data into a signal that is compatible with the phone line, and the receiving modem demodulates the signal back into digital data.

Wireless modems convert digital data into radio signals and back We therefore explore a complementary path that emphasizes simple but numerous devices that benefit from dense sensing (e.g., eight or more neighbours per node, rather than one or two) and shorter-range communication. In addition to simpler node-to-node channels due to shorter range, higher-level approaches can compensate for channel problems through approaches such as routing, link-layer re-transmission and application-layer coding.

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