TINSUKIA COLLEGE

2019

PROJECT REPORT ON MICROBIOLOGY OF WATER OF SOME AREAS IN TINSUKIA DISTRICT

A DISSERTATION AS A PART OF B.SC (MAJOR) BOTANY SYLLABUS

Physico-chemical and Microbial analysis of drinking water quality of some areas of Tinsukia with special reference to "COLIFORM BACTERIA"

PREPARED BY:

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B.SC 6th SEMESTER, 2019
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CERTIFICATE

This is to certify that Sourav Jyoti Boruah, Student of B.Sc 6th Semester, Botany (Major) of Tinsukia College has completed his project work entitled "Physico-chemical and microbial analysis of drinking water quality of some areas of Tinsukia with special reference to Coliform Bacteria " successfully as a part of a syllabus (for the academic session 2018-19) under my guidance.

This is a bonafide record performed by him.

He is being wished with the very best of his luck for the future.

Sanjukta Gohain Boruah

Date: 22-5-2019

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PREFACE

This Project report is the combination of records of our Experimental work on microbiology of water based on botanical study. Being a student of B.Sc. 6th semester Botany (Major) of Tinsukia College we have undertaken this project report entitled "Physico-chemical and microbial analysis of drinking water quality of some areas of Tinsukia with special reference to *COLIFORM BACTERIA*", as a part of the syllabus under Dibrugarh University during the session 2018-2019.This report has been made full care following the various suggestions received from teachers. It is hoped that this report will be accepted under due consideration.

ACKNOWLEDGEMENT

It is my utmost privilege in presenting the concerned Project work report. In this regard, I would like to pay my heart-full thanks and gratitude to Dr. (Mrs.) Sanjukta Gohain Baruah, Associate Professor & H.O.D for her cordial co-operation and guidance in making the Project work a success.

I am also grateful to our Laboratory assistant Sri Manoj Moran for his valuable advice and co-operation in our project work.

It is also my duty to owe my deep sense of gratitude to all my fellow members in the project for their help and support required for the completion of our project report.

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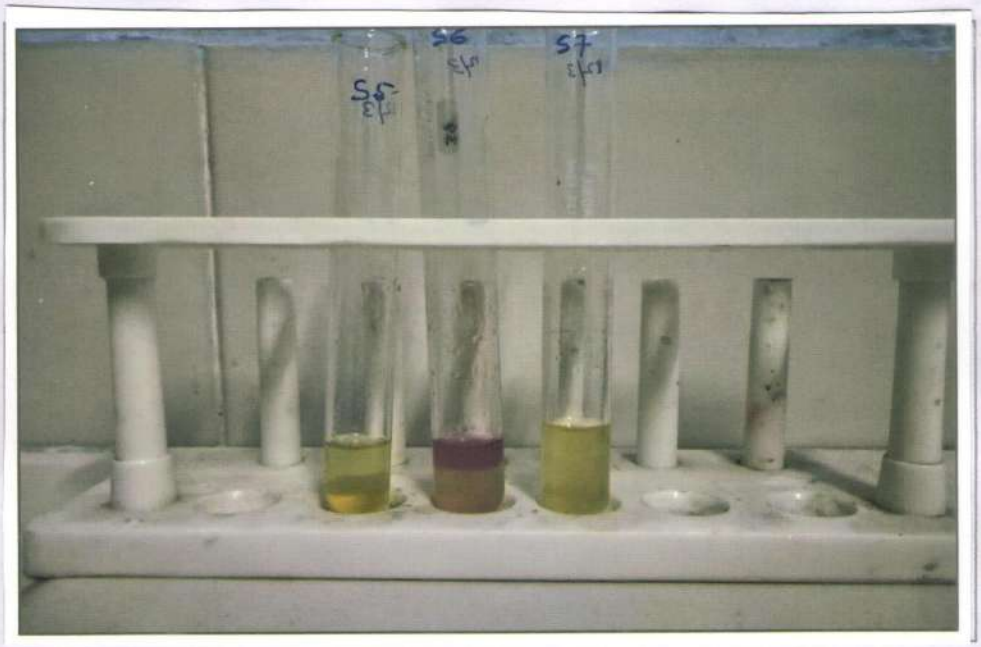
Sample S1 petridish showing growth of microbes in EMB agar medium.

Sample S2 petridish showing growth of microbes in EMB agar medium.

Indole test for samples (S1, S2, S3 & S4)



Indole test for Samples (S5, S6 & S7)

Methyl red test for samples S1, S2, S3 & S4

Methyl red test for samples S5, S6 & S7

Lactose broth test result of Samples S1, S2, S3 and S6 shows acid and gas formation