sukia College insukia PROJECT REPORT ON MICROBIOLOGY OF WATER OF SOME AREAS IN TINSUKIA DISTRICT SSERTATION 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' SUBMITTED BY -BS.c 6<sup>th</sup>semester, 20 Roll No.- 19620059 No.- \$1523044 YEAR- 2018

## Certificate

This is to certify that Rituraj Dutta, student of B.Sc 6<sup>th</sup> semester, Botany (Major) of Tinsukia College has completed his project work reoprt entitled 'Physico-chemical and microbial analysis of drinking water quality of some areas of Tinsukia district with special reference to Coliform Bacteria' successfully as a part of the syllabus (for the session 2 017-2018) under my guidance.

This is abonafide record performed by him.

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

Date: 28 4 2018

Sanjukta Gohain Bornah

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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 6<sup>th</sup> 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 2017-2018. 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 also 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 & HOD, for her cordial co-operation and guidance in making the Project work as success.

I am also grateful to our Laboratory assistant Sri Manoj Moran for members in the project for their help and support required for the completion of our project report.

## CONTENTS

7	Title	
_		Page
1.	Introduction	1-5
2.	Aim and Objective of the Project Work	6
3.	Material and methods	0
	3.1. Collection of water samples	7
	3.2. Preparation of culture media	8-11
	A. Nutrient Agar medium	0-11
	B. Lactose Broth medium	
	C. Eosine methylene blue	
	D. Peptone water medium	
	E. Glucose phosphate medium	
	F. Koser's citrate medium	
	3.3. Preparation of reagents	12-13
	A. Kovac's reagent	12-13
	B. α-napthol solution	
	C. Methyl red solution	
	D. Gram's iodine solution	
	E. 0.02N AgNO₃ solution	
	Physico-chemical tests	14
5.	Microbial analysis of water	14
	Detection of coliform group	15
7.	Study of morphological and biochemical characters	16
8.	Obsevation and Result	10
-	A. Observation 1	17
	B. Observation 2	18-26
(	C. Observation 3	27-29
- 1	D. Result	30
	E. Observation 4	31
9. 9	Statistical analysis	32
		02

10. Discussion	33-34
11. Summary	35
12. Conclusion	36
13. Bibliography/References	37-38
14. Photographs	39-43

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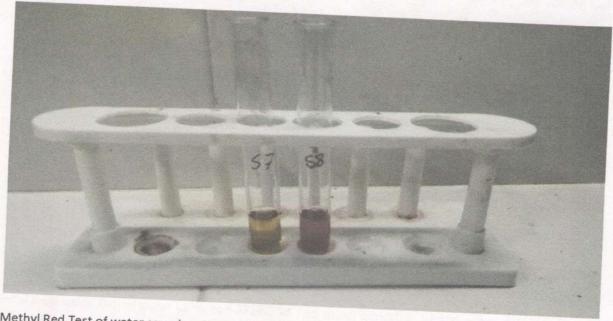
Water Sample 9 showing neighther acid nor gas formation in lactose broth medium.



Water Sample 8 showing acid and gas formation in lactose broth medium.



Methyl Red Test of water samples – S1, S2, S3,-S4, S5, S6. Red colur indicate +ve and yellow color



Methyl Red Test of water samples- S7 and S8. . Red colur indicate +ve and yellow color indicates -ve



Indol Production Test of water samples - S1, S2, S3, S4, S5, S6. Red colour indicates +ve and yellow colour indicates -ve test.



Indol Production Test of water samples – S7 and S8. Red colour indicates +ve and yellow colour indicates



Petridish of Water Sample 8 showing growth of microbes in EMB medium.



Petridish of Water Sample 8 showing growth of microbes in EMB medium