

**PROJECT REPORT of B.Sc. 6<sup>th</sup> SEM BOTANY**  
**(MAJOR)**  
**ON MICROBIOLOGY OF WATER**

**TINSUKIA COLLEGE,**  
**DIBRUGARH UNIVERSITY**

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*[Signature]*

**Physico-Chemical and  
Microbial Analysis of  
Drinking Water Quality of  
some areas of Tinsukia  
Town with special  
reference to 'COLIFORM  
BACTERIA'**



**2016-17**

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## Certificate

This is to certify that Hemanga Konwar, student of B.Sc. 6<sup>th</sup> semester, Botany (Major) of Tinsukia College has completed his Project work report entitled 'Physico-chemical and microbial analysis of drinking water quality of some areas of Tinsukia with special reference to Coli form Bacteria' successfully as a part of the syllabus (for the academic session 2016-2017) under my guidance.

<sup>2018-19</sup>  
This is a bonafide record performed by him.

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

Date: 21-4-2017

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*21-4-2017*  
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## **Preface**

This Project report is the combination 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 session 2016-17. This report has been made full care following the various suggestions received from teachers. It is hoped this report will be accepted under due consideration.

18-19

## **ACKNOWLEDGEMENT**

It is my utmost privilege in presenting the concerned Project work. 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 a success.

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

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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Photographs



Fig 1: coliform bacteria found on sample 1.

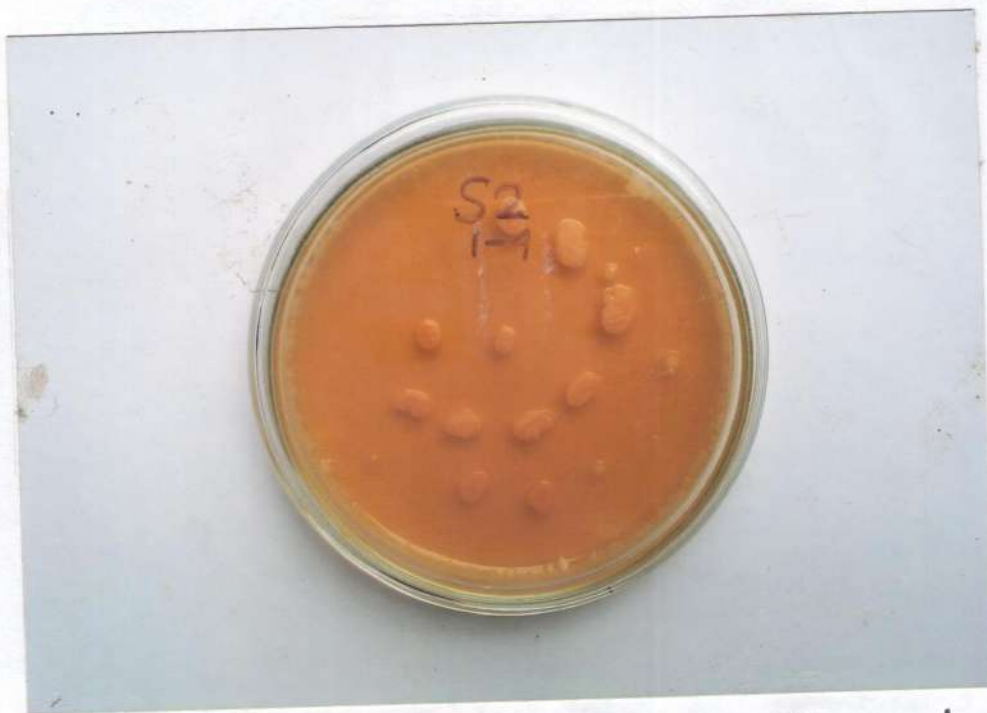


Fig 2: Light red coloured coliform bacteria of sample 2.

Photographs



Fig 3: white coloured irregular coliform bacteria of sample 3.

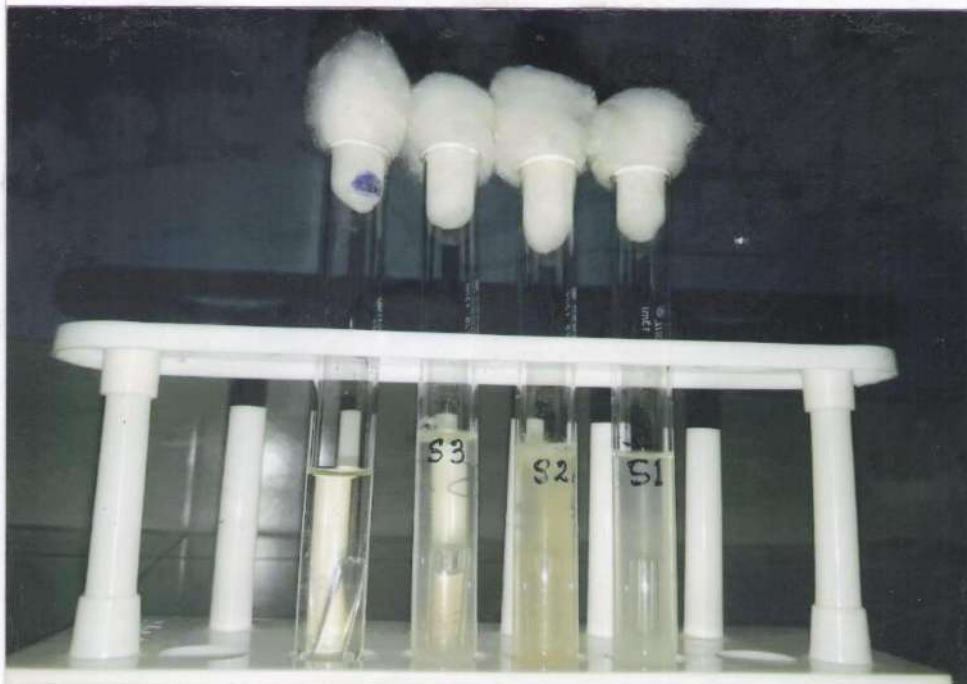


Fig 4: Incubated test tube of sample 1, 2, and 3 which shows acid and gas formation.

Photographs

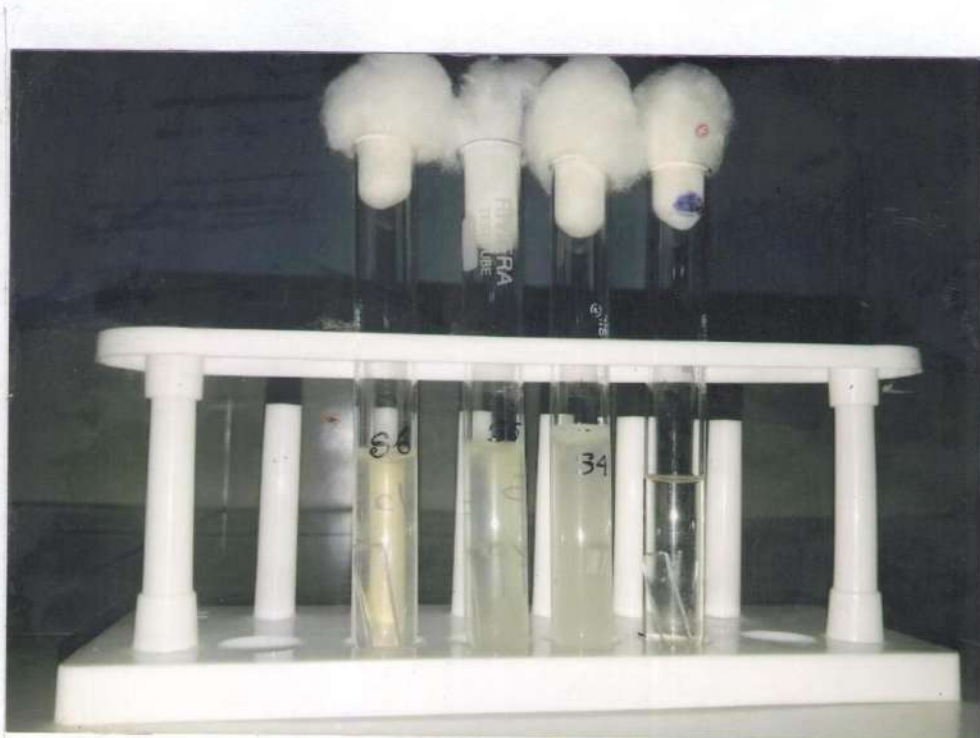


Fig 5: Incubated water samples of 4, 5, 6.



Fig 6: Production of red-pink colour which indicates the presence of indole in the samples.