

**Dissertation Reports of Students of M.Sc. (ECT/MEAC) 4th Semester, 2021
and 2022**



**Department of Electronics & Communication Technology
Gauhati University**

CERTIFICATE

This is to certified that **Adlul Alam Ahmed** Roll No: **PS-201-814-0003** and **Bhargab Jyoti Dutta** Roll No: **PS-201-814-0005** have examined this project and here by accord and approval of it as a study carried out and presented in a manner required for this expectance in partial fulfillment of the “Master of Science in Electronics and Communication Technology” (M.Sc ECT/MEAC) for which it has been submitted. The title of this project is “**Water Fountain Loop for Use in Parks**”.

This approval does not necessarily endorse or accept every statement made, opinion expressed or conclusion drawn as recorded in this report. It only signifies that acceptance of report for the purpose for which it is submitted.

Dr. Hidam Kumarjit Singh
Assistant professor, GU
Dept.of ECT, GU

Hidam Kumarjit Singh
Assistant Professor
Deptt. of Electronics and Communication Technology
Gauhati Univesity, Assam, India

Dr. Tulsi Bezbaruah
HOD of ECT, GU

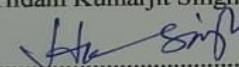


Project Presentation Evaluation Sheet

Certified that Abhijit Gogoi bearing Roll No. PS-201-814-0001 and Pranju Pratim dutta bearing Roll No. PS-201-814-0020 presented the work done titled "Designing of an Audio Amplifier with Tonality Control" and submitted a thesis with identical name and was evaluated to fulfill partial requirements of the Masters of Science(M.Sc) degree in Electronics and Communication Technology programme for the year 2020-2022 under Gauhati University.

Supervisors:

Name: Dr. Hidam Kumarjit Singh

Signature: 

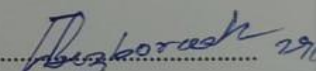
Internal Examiner:

Name:

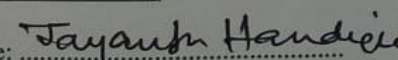
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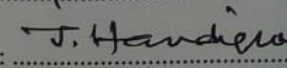
Head of the Department

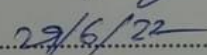
Name: Prof. Tulshi Bezboruah

Signature: 

External Examiner:

Name: 

Signature: 

Date: 

DESIGN OF MINI INVERTER AND ITS BATTERY CHARGING UNIT

A report submitted
in partial fulfilment of the Requirement of the Degree of
Master of Science in Electronics and Communication Technology

Submitted By

Bhaswati Dutta (Roll No: PS-201-814-0006)

&

Samia Shabnam (Roll No: PS-201-814-0024)

Supervised By

Dr. Hidam Kumarjit Singh



To the

DEPARTMENT OF ELECTRONICS AND COMMUNICATION TECHNOLOGY

GAUHATI UNIVERSITY, GUWAHATI – 781014, ASSAM, INDIA

September, 2021- July, 2022



Project Presentation Evaluation Sheet

Certified that Sumitra Deb bearing Roll No. PS-201-814-0025 and Loni Saikia bearing Roll No. PS-201-814-0027 presented the work done titled "Metamaterial Based Microstrip Patch Antenna for MIMO Communication" and submitted a thesis with identical name and was evaluated to fulfill partial requirements of the Masters of Science(M.Sc) degree in Electronics and Communication Technology programme for the year 2020-2022 under Gauhati University.

Supervisors:

Name: Dr. Kumaresh Sarmah

Signature:

Kumaresh Sarmah
29/06/2022

Internal Examiner:

Name: Dr. R. K. Roy

Signature:

R. K. Roy
29/6/2022

External Examiner:

Name: Jayant Handique

Signature:

J. Handique

Head of the Department

Name: Prof. Tulshi Bezboruah

Signature:

Tulshi Bezboruah 29/6/22

Date:

Head Department of
Electronics &
Communication Technology
Gauhati University



Project Presentation Evaluation Sheet

Certified that **Pratim Sarma** bearing Roll No. **PS-201-814-0021** and **Jehirul Islam** bearing Roll NO. **PS-201-814-0010** presented the work done titled **"Battery Management System for electric Vehicles Using Lithium-ion Battery"** and Submitted a thesis with identical name and was evaluated to fulfill partial requirements of the Masters of Science (M.Sc) degree in Electronics and Communication Technology programme for the year 2020-2022 under Gauhati University.

Supervisors:

Name: **Dr. Kumaresh Sarma**
Signature: *[Handwritten Signature]* 24/06/2022

Internal Examiner:

Name: **Dr. R. K. Roy**
Signature: *[Handwritten Signature]* 29/6/2022

External Examiner:

Name: **Jayanta Handique**
Signature: *[Handwritten Signature]*

Head, ECT GU

Name: **Prof. Tulshi Bezboruah**
Signature: *[Handwritten Signature]* 23/6/22

Date:
Head, Department of
Electronics &
Communication Technology
Gauhati University



CERTIFICATE

This is certify that the project work entitled “**Development of Fiber Optic Based Weight Measurement Sensor**” being submitted by **HIMLINA SAIKIA (PS-201-814-0009)** and **MADHURJYA GOGOI (PS-201-814-0013)** in partial fulfillment of the requirement for Master of Science in Electronics and Communication Technology is the record of the students’ own work carried out at Department of Electronics and Communication Technology, Gauhati University,Guwahati-781014,Assam under the supervision and guidance of **Dr. Ram Kishore Roy, Assistant Professor, Department of Electronics and Communication Technology, Gauhati University,Guwahati-781014,Assam.**

J. Handique

External examiner

R. Roy

Internal examiner

T. Bezbaruah 22/6/22
Prof. (Dr.) **Tulshi Bezbaruah**

Head, Department of
Electronics &
Communication Technology
Gauhati University

Dept. of Electronics & communication

Technology

Gauhati University, Guwahati-14, Assam



CERTIFICATE

This is to certify that the project work entitled "Development of Optical method for Measurement of Cantilever Beam Vibration" being submitted by **Parishmita Borah** (Roll. No. PS-201-814-0018), (G.U Registration No. 20070790 of 2020-2021) and **Bandita Bora** (Roll. No. PS-201-814-0004), (G.U Registration No. 17072823 of 2020-2021), in partial fulfillment of the requirement for the award of the degree of **M.Sc. in Electronics and Communication Technology**, is a record of the students own work carried out at **Department of Electronics and Communication Technology, Gauhati University, Guwahati-781014, Assam** under the supervision and guidance of **Dr. Ram Kishore Roy**, Assistant Professor, Department of Electronics and Communication Technology, Gauhati University, Guwahati-78014, Assam.

T. Bezboruah 29/6/22

Prof. (Dr.) Tulshi Bezboruah
Head,

Department of Electronics and Communication Technology,
Gauhati University, Guwahati -781014, Assam
September, 2021 – July, 2022

Head, Department of
Electronics &
Communication Technology
Gauhati University

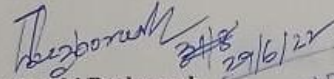
J. Handeio
External Examiner

R. Roy
Internal Examiner



CERTIFICATE

This is to certify that the project work entitled “**DEVELOPMENT OF VISCOSITY MEASUREMENT SYSTEM BASED ON ULTRASONIC SENSOR USING EXTENSION SPRING**” being submitted by **Rakesh Goswami** (Roll. No. PS-201-814-0023), (G.U Registration No. 223381 of 2016-2017) and **Kishor Kumar Boro** (Roll. No. PS-201-814-0012), (G.U Registration No. 17089932 of 2017-2018), in partial fulfilment of the requirement for the award of the degree of **M.Sc. in Electronics and Communication Technology**, is a record of the students own work carried out at **Department of Electronics and Communication Technology, Gauhati University, Guwahati-781014, Assam** under the supervision and guidance of **Dr. Ram Kishore Roy**, Assistant Professor, Department of Electronics and Communication Technology, Gauhati University, Guwahati-781014, Assam.


Prof. (Dr.) Tulshi Bezboruah

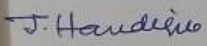
Head,

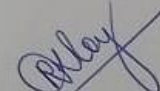
Department of Electronics and Communication Technology,

Gauhati University, Guwahati -781014, Assam

September, 2021 – June, 2022

Head, Department of
Electronics &
Communication Technology
Gauhati University


External Examiner


Internal Examiner



CERTIFICATE

This is to certify that the project work entitled “**Development of Displacement Sensor based on Fiber Optic Sensing Principle**” being submitted by **Trinankur Deb Roy** (Roll. No.-PS-191-814-0025) (G.U Registration No.- 205842 of 2016-17) and **Rupjyoti Barman** (Roll. No.-PS-191-814-0020) (G.U Registration No.- 205827 of 2016-17), in partial fulfillment of the requirement for the award of the degree of M.Sc. in Electronics and Communication Technology, is a record of the student own work carried out at Department of Electronics and Communication Technology, Gauhati University, Guwahati-781014, Assam under my supervision and guidance of **Dr. Ram Kishore Roy**, Assistant Professor, Department of Electronics and Communication Technology, Gauhati University, Guwahati-781014, Assam.

Prof. (Dr.) Tulshi Bezboruah

Head,

Department of Electronics and Communication Technology

Gauhati University, Guwahati-14, Assam



CERTIFICATE

This is to certify that the project work entitled “**Development of Android Application for Multistage Parking Slots Information System Based on Ultrasonic Method with Bluetooth Connectivity**” being submitted by **Rupamjyoti Saikia** (Roll. No.-PS-191-814-0019) and **Tuturanjan Chetia** (Roll. No.-PS-191-814-0026) in partial fulfillment of the requirement for the award of the degree of M.Sc. in Electronics and Communication Technology, is a record of the student own work carried out at Department of Electronics and Communication Technology, Gauhati University, Guwahati-781014, Assam under my supervision and guidance of **Dr. Ram Kishore Roy**, Assistant Professor, Department of Electronics and Communication Technology, Gauhati University, Guwahati-781014, Assam.

Tulshi Bezboruah 26/9/21

Prof. (Dr.) Tulshi Bezboruah

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Guwahati-781014, Assam