



THE ASSAM
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GUWAHATI

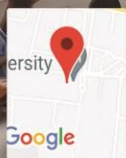
CRITERION 1

CURRICULAR ASPECTS

METRIC NO.
1.3.3

B. Tech Mechanical Engineering

Field Work / Research Project / Internship



Guwahati, Assam, India
4P6F+QH7, Royal Path, Betkuchi, AHOM GAON, Guwahati, Assam
781040, India
Lat 26.112206°
Long 91.72404°
29/12/22 10:22 AM GMT +05:30

**PERFORMANCE ANALYSIS OF A VAPOUR
COMPRESSION REFRIGERATION SYSTEM WITH
LIQUID VAPOUR HEAT EXCHANGER**

*A Project Report Submitted in Partial Fulfillment of the Requirements for
the Degree of*

Bachelor of Technology

In

Mechanical Engineering

Submitted by

Jyotishman Saikia 172022008

Abhijit Baishya 172022001

Plabon Boruah 172022011

Under the Guidance of

Zunaid Ahmed

Assistant Professor



ROYAL GLOBAL UNIVERSITY
GUWAHATI

DEPARTMENT OF MECHANICAL ENGINEERING

Royal School Of Engineering & Technology

GUWAHATI -781035

Formal

B. Bordhy

HOD/Coordinator

Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on "PERFORMANCE ANALYSIS OF A VAPOUR COMPRESSION REFRIGERATION SYSTEM WITH LIQUID VAPOUR HEAT EXCHANGER" and here by accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfilment for the Bachelor Of Technology (Mechanical Engineering) for which it has been submitted by Jyotishman Saikia (172022008), Abhijit Baishya (172022001), Plabon Boruah (172022011).

This approval does not necessarily accept every statement made, opinion expressed, or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this project for which it has been submitted.

The Viva-Voce examination of above candidates of 7th semester B.T'ech(Mechanical Engineering) of their project held on 06/01/2021 and found satisfactory.

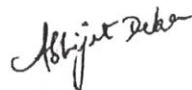


Signature

Mr. Zunaid Ahmed
(Project Guide)

Date: 06/01/2021


Signature



Dr. Abhijit Deka
(HOD, ME)

Date: 06/01/2021

Signature Of Examiner



Date: 06/01/2021

TITLE OF THE PROJECT:

**EXPERIMENTAL SETUP OF A MINI INDUCED DRAFT
COUNTERFLOW COOLING TOWER**

of

Bachelor of Technology

in

Mechanical Engineering

Submitted By:

Name: Karan Sangma

Roll No: 182022005

Name: Sayam Agarwal

Roll No. 192022001

Under the guidance of:

Name of the Guide: Mr Biswajit Choudhury

Assistant Professor



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DEPARTMENT OF MECHANICAL ENGINEERING
Royal School of Engineering & Technology
The Assam Royal Global
GUWAHATI -781035

Forwarded

B. Choudhury

HOD/Coordinator

Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

DEPARTMENT OF MECHANICAL ENGINEERING
ROYAL SCHOOL OF ENGINEERING & TECHNOLOGY
BETKUCHI, GUWAHATI -35



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GUWAHATI

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on “**EXPERIMENTAL SETUP OF A MINI INDUCED DRAFT COUNTERFLOW COOLING TOWER**” and hereby accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfilment for the Bachelor Degree (Mechanical Engineering) for which it has been submitted by

Sayam Agarwal (192022001)

Karan Sangma (182022005)

This approval does not necessarily accept every statement made , opinion expressed, or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva-Voce examination of above candidates of 8th semester B.Tech (Mechanical Engineering) of their project has been held on28/07/2022 and found satisfactory

.....28/7/22.....

Signature of Head of Department
Department of Mechanical Engineering
Royal School of Engineering & Technology
Guwahati- 781035

.....28/07/2022.....
Signature of External Examiner

DESIGN AND FABRICATION OF A PELTIER REFRIGERATOR.

A Project Report Submitted in Partial Fulfilment of the Requirements for
the Degree of Bachelor of Technology
In Mechanical Engineering

Submitted By

Raktutpal Saikia (182022010)

Manas Pratim Bora (182022006)

Prabahan Kumar Moral (182022007)

Under the Guidance of

Mr. Zunaid Ahmed

Assistant Professor



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Blindley

HOD/Coordinator

Department of Mechanical Engineering

Royal School of Engineering & Technology

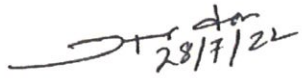
The Assam Royal Global University

Betkuchi, NH 37, Guwahati 781035

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on '**Design and Fabrication of a PELTIER REFRIGERATOR**' and here by accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfilment for the Bachelor Degree (Mechanical Engineering) for which it has been submitted by Raktutpal Saikia (182022010), Manas Pratim Bora (182022006), and Prabahan Kumar Moral (182022007). This approval does not necessarily accept every statement made, opinion expressed, or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva-Voce examination of above candidates of 7th semester B. Tech (Mechanical Engineering) of their project has been held on 28/07/2022 and found satisfactory.


.....

Signature of Head of Department


.....

Signature of

External Examiner

DESIGN & FABRICATION OF CNC PLOTTER MACHINE

Bachelor of Technology

in

Mechanical Engineering

Submitted by:

| | |
|---------------------------|--------------------|
| Name: Prinseya Buragohain | Roll no: 182022016 |
| Name: Zahir Ahmed | Roll no: 182022019 |
| Name: Karan Singh Rathore | Roll no: 172022009 |

Under the Guidance of:

Name of the Guide: Mr. Ashok Talukdar (Asst. Professor)



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Royal School of Engineering & Technology
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Bhondly

HOD/Coordinator
Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035



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CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on “**Design & Fabrication of CNC Plotter Machine**” and hereby accord of it as a study carried out and presented in a manner required for acceptance and fulfilment for the Bachelor Degree (Mechanical Engineering) for which it has been submitted by **Prinseya Buragohain (182022016), Zahir Ahmed (182022019), Karan Singh Rathore (172022009)**.

This approval does not necessarily accept every statement made, opinions expressed, of conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva- Voce examination of above candidates of 8th semester B. Tech (Mechanical Engineering) of their project has been held on ...28/07/2022... and has been found satisfactory.

.....
Signature of Project Guide

.....
Signature of External Examiner

.....
Signature of Head of Department

TITLE OF THE PROJECT
**COMPACT STRAW COUNTING AND PACKING
DEVICE**

Project Progress Report

Submitted by:

Baibhav Roy-182022002

Shakthi Narayanan-182022012

Safrin Ahmed-182022015

Under the Guidance of:

Dr. Hirak Ranjan Das

Head of Department

(Mechanical Engineering)



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Bhondly

HOD/Coordinator

Department of Mechanical Engineering
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TECHNOLOGY
BETKUCHI, GUWAHATI -35



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GUWAHATI

CERTIFICATE OF APPROVAL

This is to certify that the report of the final project entitled “Compact Straw counting and packing machine”, submitted by Shakthi Narayanan, Safrin Ahmed, and Baibhav Roy, Roll No: 182022012, 182022015, and 182022002 respectively of Royal School of Engineering & Technology is a record of bona-fide research work under my supervision and I consider it worthy for the project for award of the degree of **Bachelor of Mechanical Engineering of Gauhati University**. The results embodied in this report have not been submitted to any other University or Institute for the award of Degree or Diploma.

(Prof. Dr. Hirak Ranjan Das)

Department of Mechanical Engineering
Royal School of Engineering & Technology
Guwahati-781035

Date:

DEPARTMENT OF MECHANICAL ENGINEERING
ROYAL SCHOOL OF ENGINEERING &
TECHNOLOGY
BETKUCHI, GUWAHATI -35



ROYAL GLOBAL UNIVERSITY
GUWAHATI

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on 'COMPACT STRAW COUNTING AND PACKING MACHINE' and here by accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfillment for the degree of Bachelor of Technology (Mechanical Engineering) for which it has been submitted by

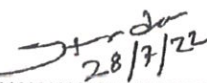
BAIBHAV ROY-182022002

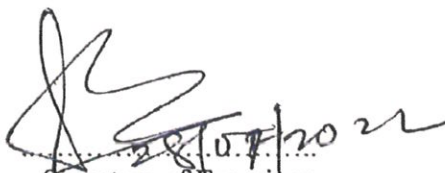
SHAKTHI NARAYANAN-182022012

SAFRIN AHMED-182022015

This approval does not necessarily accept every statement made, opinion expressed, or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva-Voce examination of above candidates of 8th semester B.E. (Mechanical Engineering) of their project has been held on ...28/07/2022... and found satisfactory.


.....
Signature of Head of Department


.....
Signature of Examiner

Department of Mechanical Engineering
Royal School of Engineering & Technology
Guwahati-781035

SOLAR POWER STATION FOR EV CHARGING

A Project Report Submitted in Partial Fulfillment of the Requirements for the Degree of

Bachelor of Technology

in

Mechanical Engineering

Submitted by
Satish Gohain - 182022011
Siddharth Nandi - 182022013

Under the Guidance of
Dr. Hirak Ranjan Das
HOD



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Department of Mechanical Engineering
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ROYAL GLOBAL UNIVERSITY
GUWAHATI

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on “**SOLAR POWER STATION FOR EV CHARGING**” and hereby accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfilment for the Bachelor Degree (Mechanical Engineering) for which it has been submitted by

Satish Gohain (182022011)

Siddharth Nandi (182022013)

This approval does not necessarily accept every statement made, opinion expressed, or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva-Voce examination of above candidates of 8th semester B. Tech (Mechanical Engineering) of their project has been held on 28/07/2022 and found satisfactory.

Signature of Head of Department

Department of Mechanical Engineering
Royal School of Engineering &
Technology
Guwahati-781035

Signature of External Examiner

TITLE OF THE PROJECT
**COMPACT STRAW COUNTING AND PACKING
DEVICE**

Project Progress Report

Submitted by:

Baibhav Roy-182022002

Shakthi Narayanan-182022012

Safrin Ahmed-182022015

Under the Guidance of:

Dr. Hirak Ranjan Das

Head of Department

(Mechanical Engineering)



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HOD/Coordinator
Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
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BETKUCHI, GUWAHATI -35



ROYAL GLOBAL UNIVERSITY
GUWAHATI

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on 'COMPACT STRAW COUNTING AND PACKING MACHINE' and here by accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfillment for the degree of Bachelor of Technology (Mechanical Engineering) for which it has been submitted by

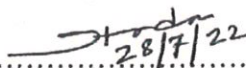
BAIBHAV ROY-182022002

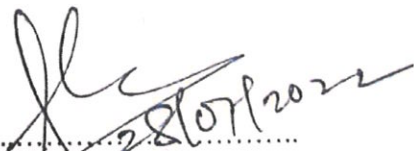
SHAKTHI NARAYANAN-182022012

SAFRIN AHMED-182022015

This approval does not necessarily accept every statement made, opinion expressed, or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva-Voce examination of above candidates of 8th semester B.E. (Mechanical Engineering) of their project has been held on 28/07/2022 and found satisfactory.


.....
Signature of Head of Department


.....
Signature of Examiner

Department of Mechanical Engineering
Royal School of Engineering & Technology
Guwahati-781035

DESIGN AND DEVELOPMENT OF GREEN SMASH TRAINING MACHINE

*A Project Report Submitted in Partial Fulfillment of the Requirements for the
Degree of*

Bachelor of Technology

in

Mechanical Engineering

Submitted by

Mehedi Alom - 202022002(Lat)
Chanakya Borgohain - 192022003
Jeherul Islam - 202022001(Lat.)

Under the Guidance of

Mr. Zunaid Ahmed
Assistant Professor



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DEPARTMENT OF MECHANICAL ENGINEERING

Royal School of Engineering & Technology

The Assam Royal Global University

GUWAHATI – 781035

Forwarded

Choudhury

HOD/Coordinator

Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

DEPARTMENT OF MECHANICAL ENGINEERING
ROYAL SCHOOL OF ENGINEERING & TECHNOLOGY
BETKUCHI, GUWAHATI -35



ROYAL GLOBAL UNIVERSITY
GUWAHATI

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on “**DESIGN AND DEVELOPMENT OF GREEN SMASH TRAINING MACHINE**” and hereby accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfilment for the bachelor’s degree (Mechanical Engineering) for which it has been submitted by

MEHEDI ALOM (202022002 Lat.)

CHANAKYA BORGHAIN (192022003)

JEHERUL ISLAM (202022001 Lat.)

This approval does not necessarily accept every statement made, opinion expressed, or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva-Voce examination of above candidates of 8th semester B. Tech (Mechanical Engineering) of their project has been held on 15/08/2023 and found satisfactory.


13/8/2023

Signature of Head of Department

Department of Mechanical Engineering
Royal School of Engineering &
Technology
Guwahati-781035

Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035



Signature of External Examiner

ROYAL SCHOOL OF ENGINEERING AND TECHNOLOGY



ROYAL GLOBAL UNIVERSITY
GUWAHATI

PROJECT REPORT ON PRODUCTIVITY IMPROVEMENT OF SELECTED BRICK INDUSTRIES OF ASSAM

Submitted in partial fulfilment of the requirement for the
Degree of Bachelor of Technology

In

DEPARTMENT OF MECHANICAL ENGINEERING

Submitted by:

RAJ PHUKAN
PRITAM SARMA
SAJEEV OLEMAN

Choudhury

HOD/Coordinator

Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

Roll No.

192022006
192022009
(LT) 202022003

Project Guide:

Mr. Ashok Talukdar
(Asst. Professor)

CERTIFICATE OF APPROVAL

This is to certify that the report of the final project entitled “**Productivity Improvement of selected Brick Industries in Assam**”, submitted by **RAJ PHUKAN (192022006)**, **PRITAM SARMA (192022009)**, **SAJEEV OLEMAN (LT 202022003)** to Royal School of Engineering & Technology is a record of bona-fide work under my supervision and I consider it worthy for the project for award of the degree of **Bachelor of Technology Mechanical Engineering of The Assam Royal Global University**. The results embodied in this report have not been submitted to any other University or Institute for the award of Degree or Diploma.

PROJECT GUIDE



(MR. ASHOK TALUKDAR)

Assistance Professor
Department of Mechanical Engineering
Royal School of Engineering & Technology
Guwahati-781035

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on **'Productivity Improvement of selected Brick Industries in Assam'** and here by accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfilment for the Bachelor Degree (Mechanical Engineering) for which it has been submitted by **RAJ PHUKAN (1920222006), PRITAM SARMA (192022009), SAJEEV OLEMAN (LT. 202022003)**.

This approval does not necessarily accept every statement made, opinion expressed or conclusion drawn as recorded in this thesis. It only signifies the acceptance of this thesis for which it has been submitted.

The Viva-Voce examination of above candidates of 8th semester B. Tech (Mechanical Engineering) of their project has been held on 15/06/2023 and found satisfactory.

.....
Signature of Head of Department/Coordinator

(Signature)
12/6/2023
H.O.D. (19)
Denw. Mech. Engg.
Rajshahi - 7

.....
Signature of External Examiner

(Signature)

THE ASSAM ROYAL GLOBAL UNIVERSITY
ROYAL SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING



ROYAL GLOBAL UNIVERSITY
— GUAHATI —

FINAL YEAR PROJECT
ON
DESIGN & FABRICATION OF SMART DUSTBIN - CANNY

A Final year project report submitted in partial fulfilment
of the requirements for the degree of

Bachelor of Engineering

Submitted By:

Nilabhra Dutta (192022004)

Roktim Gogoi (192022007)

Shankhanil Borgohain (192022008)

PROJECT GUIDE:

Mr. BISWAJIT CHOUDHURY

Head of Department

Department of Mechanical Engineering

forwarded

B. Choudhury

HOD/Coordinator
Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

DEPARTMENT OF MECHANICAL
ENGINEERING, ROYAL SCHOOL OF
ENGINEERING & TECHNOLOGY, BETKUCHI,
GUWAHATI -35



CERTIFICATE OF APPROVAL

This is to certify that **Nilabhra Dutta (192022004)**, **Roktim Gogoi (192022007)**, **Shankhanil Borgohain (192022008)** students of B. Tech 4th Year, have completed the project entitled "Design and Fabrication of Smart Dustbin-CANNY" during the academic session 2022-23 under my supervision and guidance.

I consider it worthy for the project for award of the degree of Bachelor of Mechanical Engineering of The Assam Royal Global University. The results embodied in this report have not been submitted to any other University or institute for the award of Degree or Diploma.


13/6/2023

PROJECT GUIDE
Mr. Biswajit Choudhury

Head of Department,
Royal School of Engineering & Technology
Guwahati-781035

Date: 13/6/2023

HOD/Coordinator
Department of Mechanical Engineering
Royal School of Engineering & Technology
The Assam Royal Global University
Betkuchi, NH 37, Guwahati 781035

DEPARTMENT OF MECHANICAL
ENGINEERING, ROYAL SCHOOL OF
ENGINEERING & TECHNOLOGY,
BETKUCHI, GUWAHATI -35



ROYAL GLOBAL UNIVERSITY
GUWAHATI

CERTIFICATE OF APPROVAL

This is to certify that we have examined this report on “**Design and Fabrication of Smart Dustbin-CANNY**” and hereby accord or approve of it as a study carried out and presented in a manner required for its acceptance and fulfillment for the Bachelor Degree (Mechanical Engineering) for which it has been submitted by **Nilabhra Dutta (192022004), Raktim Gogoi (192022007) & Shankhanil Borgohain (192022008)**.

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

The viva-Voce examination of above candidates of final year B. tech (Mechanical Engineering) of their project has been held on 15/06/2023 and found satisfactory.


.....

Mr. Biswajit Choudhury
Head of Department

ME, RSET
(PROJECT GUIDE)


.....

Signature of External Examiner