

GEO THERMAL ENERGY

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY – AKASH GOUDA

ROLL NUMBER - CH2414074

GUIDED BY - SMT. ARATI DIXIT

LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS
GOVERNMENT SCIENCE COLLEGE,
CHATRAPUR

DECLARATION

I do hereby declares that the project work "GEOTHERMAL ENERGY" is the detailed review work carried out by me independently under guidance and supervision of SMT.ARATI DIXIT, Lecturer in Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Akash Gouda

NAME:- AKASH GOUDA

ROLL NO.:- CH2414074

PHOTO ELECTRIC EFFECT

PROJECT REPORT (DSE-04), 6TH SEMESTER

ROLL NUMBER - CH2414075

SUBMITTED BY - AMIT KUMAR NAYAK,

GUIDED BY – SRI PRADYUMNA MADHEI

HOD OF PHYSICS



DEPARTMENT OF PHYSICS
GOVERNMENT SCIENCE COLLEGE,
CHATRAPUR

DECLARATION

I do hereby declares that the project work "PHOTO ELECTRIC EFFECT" is the detailed review work carried out by me independently under guidance and supervision of Sri Pradyumna Madhei HOD of Physics submitted partial fulfilment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Amit Kumar Nayak

NAME:- AMIT KUMAR NAYAK

ROLL NO :- CH2414075

SOLAR ENERGY

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY - AYUSHMAN RAULA

ROLL NUMBER - CH2414076

GUIDED BY - DR. ARATI DIKHIT

LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS
GOVERNMENT SCIENCE COLLEGE,
CHATRAPUR

DECLARATION

I do hereby declares that the project work "SOLAR ENERGY" is the detailed review work carried out by me independently under guidance and supervision of DR. ARATI DIKHIT, Lecturer in Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Ayushman Raula

NAME:- AYUSHMAN RAULA

ROLL NO.:- CH2414076

SUPERCONDUCTIVITY

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY - HIMASNHU BEHERA

ROLL NUMBER - CH2414077

GUIDED BY - SRI PRADYUMNA MADHEI

HOD OF PHYSICS



DEPARTMENT OF PHYSICS
GOVERNMENT SCIENCE COLLEGE,
CHATRAPUR

DECLARATION

I do hereby declares that the project work "SUPERCONDUCTIVITY" is the detailed review work carried out by me independently under guidance and supervision of SRI PRADYUMNA MADHEI, HOD of Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Himanshu Behera

NAME:- HIMANSHU BEHERA

ROLL NO:- CH2414077

POLARIZATION OF ELECTROMAGNETIC WAVES

PROJECT REPORT DSE -04,6thSEMESTER

SUBMITTED BY – N NIRMALA REDDY

ROLL NO -CH2414080

GUIDED BY – PRADYUMNA MADHEI

HEAD OF DEPARTMENT OF PHYSICS



DEPARTMENT OF PHYSICS

GOVERNMENT SCIENCE COLLEGE CHATRAPUR

GANJAM, ODISHA

DECLARATION

I do here by declare that the project work entitled "POLARIZATION OF ELECTROMAGNETIC WAVES" is the detailed review work carried out by me independently under guidance and supervision of PRADYUMNA MADHEI, Head of Department of Physics submitted partial fulfilment of discipline specific elective-4 ,6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

N Nirmala Reddy

NAME: N NIRMALA REDDY

ROLL NO: CH2414080

**STUDY OF CHARACTERISTICS OF LIGHT
DEPENDENT RESISTOR AND IT'S APPLICATIONS**

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY- PANKAJ KUMAR GOUDA

ROLL NUMBER- CH2414081

GUIDED BY-

PRADYUMNA MADHEI

LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS

GOVERNMENT SCIENCE COLLEGE, CHATRAPUR

DECLARATION

I do hereby declares that the project work "STUDY OF CHARACTERISTICS OF LIGHT DEPENDENT RESISTOR AND IT'S APPLICATIONS " is the detailed review work carried out by me independently under guidance and supervision of SMT.ARATI DIXIT, Lecturer in Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Pankaj Kumar Gouda
NAME: PANKAJ KUMAR GOUDA

ROLL NO: - CH2414081

Magnetic properties of matter

PROJECT REPORT DSE-4, 6th SEMESTER

SUBMITTED BY-RAJANI BEHERA

ROLL No-CH2414082

GUIDED BY- SMT. ARATI DIXIT

LECTURE IN PHYSICS



DEPARTMENT OF PHYSICS

GOVERNMENT SCIENCE COLLEGE,

CHHATRAPUR

DECLARATION

I do hereby declares that the project work "MAGNETIC PROPERTIES OF MATTER" is the detailed review work carried out by me independently under guidance and supervision of **SMT. ARATI DIXIT** lecture in physics submitted partial fulfilment of discipline specific elective-4,6th semester 2026 in physics, Berhampur university, Berhampur has not been submitted anywhere else before.

Rajani Behera
NAME -RAJANI BEHERA
ROLL NO-CH2414082

GOVERNMENT SCIENCE COLLEGE



(CHATRAPUR, GANJAM, ODISHA)

AFFILIATED BY- BERHAMPUR UNIVERSITY



SEMICONDUCTOR



[PROJECT REPORT DSE – 4,6TH SEMESTER]

GUIDED BY –MR .PRADYUMNA MADHEI

SUBMITTED BY – RANJITA KUMAR NAHAK

ROLL NO- CH2414084

DECLARATION

I do here by declare that the project work "SEMICONDUCTOR" is the detailed review work carried out by me independently under guidance and supervision of **Mr. Pradyumna Madhei** head of department of physics submitted partial fulfilment of discipline specific elective-4 ,6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Ranjita Ku Nahak
Ranjita Kumar Nahak
ROLL NO- CH2414084

Geostationary Satellite

[PROJECT REPORT DSE-04, 6th SEMESTER]
SUBMITTED BY – RITESH NAHAK
ROLL NUMBER - CH2414085

DEPARTMENT OF PHYSICS

GUIDED BY- ARATI DIKHIT
LECTURER IN PHYSICS



ଏକାକୀୟ ବିଭାଗ ମହାବିଦ୍ୟାଳୟ, ଛତ୍ରପୁର, ଗଞ୍ଜାମ, ଓଡ଼ିଶା
Government Science College, Chatrapur, Ganjam, Odisha

DECLARATION

I do hereby declares that the project work "**Geostationary Satellite**" is the detailed review work carried out by me independently under guidance and supervision of **DR. ARATI DIKHIT**, Lecturer in Physics submitted partial fulfilment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Ritesh Nahak

NAME: - Ritesh Nahak

ROLL NO.: - CH2414085

A PROJECT REPORT ON
SOLAR CELLS



SOLAR CELLS

[PROJECT REPORT DSE -4,6TH SEMESTER]

SUBMITTED BY :- ROSHAN KUMAR SAHU

ROLL NO – CH2414087

GUIDED BY

MR. PRADYUMNA MADHEI

HEAD OF DEPARTMENT OF PHYSICS



DEPARTMENT OF PHYSICS

**GOVERNMENT SCIENCE COLLAGE
CHATRAPUR ,GANJAM, ODISHA**

DECLARATION

I do hereby declares that the project work "SOLAR CELL" is the detailed review work carried out by me independently under guidance and supervision of Mr. PRADYUMNA MADHEI, Lecturer in Physics submitted partial fulfilment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Roshan Kumar Sahu
ROSHAN KUMAR SAHU
ROLL NO - CH2414087

CYCLOTRON

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY – RUDRAKHYA NAHAK

ROLL NUMBER - CH2414088

GUIDED BY - *Arzati* Dixit

LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS
GOVERNMENT SCIENCE COLLEGE,
CHATRAPUR

DECLARATION

I do hereby declares that the project work "CYCLOTRON" is the detailed review work carried out by me independently under guidance and supervision of SMT.ARATI DIXIT, Lecturer in Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

NAME:- RUDRAKHYA NAHAK

ROLL NO.:- CH2414088

Rudrakhya Nahak

A PROJECT REPORT ON
RADIOACTIVE DECAY

(PROJECT REPORT DSE-4 6TH SEMESTER 2026)

SUBMITTED BY:- S SAILAJA

EXAM ROLL NO :-CH2414089

REGD. NO. :-03673/2023

COLLEGE ROLL NO. :- BS-23-003

GUIDED BY

PRADYUMNA MADHEI

(HOD OF DEPARTMENT OF PHYSICS)



DEPARTMENT OF PHYSICS

GOVERNMENT SCIENCE COLLEGE CHATRAPUR

DECLARATION

I do here by declare that the project work entitled "RADIOACTIVE DECAY " is the detailed review work carried out by me independently under guidance and supervision of PRADYUMNA MADHEI, Head Of Department Of Physics submitted partial fulfilment of discipline specific elective-4 ,6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

S. Sailaja

NAME:- S SAILAJA
ROLL NO. :- CH2414089

GOVERNMENT SCIENCE COLLEGE



(CHATRAPUR, GANJAM, ODISHA)

AFFILIATED BY - BERHAMAPUR UNIVERSITY



WAVE ENERGY



PROJECT REPORT DSE-4,6TH SEMESTER

GUIDED BY - MR. PRADYUMNA MADHEI

SUBMITTED BY - SAI SWORUPA MAJHEE

ROLL NO-CH2414090

DECLARATION

I do here by declare that the project work "WAVE ENERGY" is the detailed review work carried out by me independently under guidance and supervision of **Mr. Pradyumna Madhei** head of department of physics submitted partial fulfilment of discipline specific elective-4 ,6thsemester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Sai Sworupa Majhee

Sai sworupa majhee

Roll No-CH2414090

5G TECHNOLOGIES

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY- SAMBIT TARAI

ROLL NUMBER- CH2414091

GUIDED BY-

PRADYUMNA MADHEI

LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS

GOVERNMENT SCIENCE COLLEGE, CHATRAPUR

ACKNOWLEDGMENT

I take the pleasant opportunity to release the feelings of deep sense of sincere gratitude indebtedness imprisoned in the core of my heart to my esteemed guide **Smt. Arati Dixit**, Lecturer in Physics for her untiring guidance, inspiration and continuous supervision without which the project work could not have brought to a reality.

I am also very much grateful to **Mr. Pradyumna Madhei, Mr. Sadasiba Barad, Mrs. Pratyusha Devi, Miss. Kadambini Gouda, Mr. Pratyush karjee, Mr. Lipu Singh, Mr. Jatin Behera** for encouragement, valuable suggestion and guidance or completion of this project work.

Sambit Tarai
NAME: SAMBIT TARAI

ROLL NO: - CH2414091

GOVERNMENT SCIENCE COLLEGE



(CHATRAPUR, GANJAM, ODISHA)

AFFILIATED TO – BERHAMAPUR UNIVERSITY



PROJECT REPORT DSE-4,6TH SEMESTER
GUIDED BY – MR.PRADYUMNA MADHEI
SUBMITTED BY- SANAT KUMAR BEHERA
ROLL NO –CH2414092

DECLARATION

I do here by declare that the project work "**LI-FI TECHNOLOGY**" is the detailed review work carried out by me independently under guidance and supervision of **Mr. Pradyumna Madhei** head of department of physics submitted partial fulfilment of discipline specific elective-4,6thsemester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Sanat Kumar Behera

SANAT KUMAR BEHERA

ROLL NO - CH2414092

GOVERNMENT SCIENCE COLLEGE



(CHATRAPUR, GANJAM, ODISHA)

AFFILIATED BY - BERHAMAPUR UNIVERSITY



TIME DILATION



PROJECT REPORT DSE-4,6TH SEMESTER
GUIDED BY - MR.PRADYUMNA MADHEI
SUBMITTED BY-SAUMYAJEET NAYAK
ROLL NO-CH241409S

DECLARATION

I do here by declare that the project work "**TIME DILUTION**" is the detailed review work carried out by me independently under guidance and supervision of **Mr. Pradyumna Madhei** head of department of physics submitted partial fulfilment of discipline specific elective-4 ,6thsemester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Saumyajeet Nayak
SAUMYAJEET NAYAK
ROLL NO- CH2414093

A PROJECT REPORT ON:

OPTICAL FIBRE

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY - SIBA PRASAD MISHRA

ROLL NUMBER - CH2414094

GUIDED BY - SRI PRADYUMNA MADHEI

HOD OF PHYSICS



DEPARTMENT OF PHYSICS

GOVERNMENT SCIENCE COLLEGE,

CHATRAPUR

DECLARATION

I, **Siba Prasad Mishra**, do hereby declare that the project entitled "**OPTICAL FIBRE**" is an authentic and independent review work carried out by me under the esteemed guidance and supervision of **Sri Pradyumna Madhei**, HOD of **Physics**.

This manuscript is submitted in partial fulfillment of the **Discipline Specific Elective-4** course requirements for the **6th-semester (2026)** curriculum in **Physics** at **Berhampur University, Berhampur**. I certify that this project has not been previously submitted, in whole or in part, to any other institution or university.

Siba prasad Mishra

NAME:-SIBA PRASAD MISHRA

ROLL NO.:- CH2414094

GOVERNMENT SCIENCE COLLEGE



(CHATRAPUR, GANJAM, ODISHA)

AFFILIATED TO – BERHAMAPUR UNIVERSITY



LOGIC GATES USING ICs



PROJECT REPORT DSE-4,6th SEMESTER

GUIDED BY – MR.PRADYUMNA MADHEI

SUBMITTED BY- SOMYARANJAN BEHERA

ROLL NO –CH2414095

DECLARATION

I do here by declare that the project work "**LOGIC GATES USING ICs**" is the detailed review work carried out by me independently under guidance and supervision of **Mr. Pradyumna Madhei** head of department of physics submitted partial fulfilment of discipline specific elective-4,6thsemester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Somyaranjan Behera
SOMYARANJAN BEHERA
ROLL NO - CH2414095

NANOMATERIAL SYNTHESIS AND APPLICATION

[PROJECT REPORT DSE-04, 6TH SEMESTER]
SUBMITTED BY – SRIKRUTI PRIYADARSHANI SAHU
ROLL NUMBER - CH2414096
GUIDED BY - Dr. ARATI DIKHIT
LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS
GOVERNMENT SCIENCE COLLEGE,
CHHATRAPUR

DECLARATION

I do hereby declares that the project work "NANOMATERIAL SYNTHESIS AND APPLICATION" is the detailed review work carried out by me independently under guidance and supervision of Dr. ARATI DIKHIT, Lecturer in physics submitted partial fulfilment of discipline specific elective-4, 6th semester 2024 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Srikruti Priyadarshani Sahu

NAME: -SRIKRUTI PRIYADARSHANI SAHU

ROLL NO: -CH2414096

GOVERNMENT SCIENCE COLLEGE

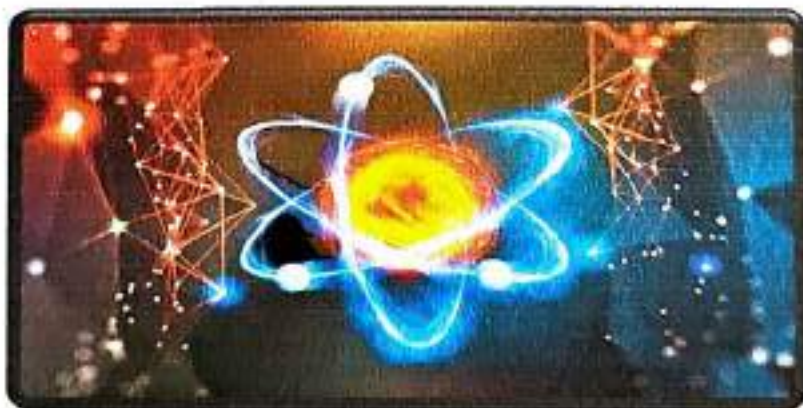


(CHATRAPUR, GANJAM, ODISHA)

AFFILIATED BY - BERHAMPUR UNIVERSITY



ATOMIC PHYSICS



PROJECT REPORT DSE-4,6TH SEMESTER

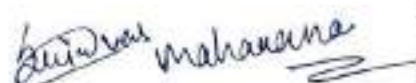
GUIDED BY - MR. PRADYUMNA MADHEI

SUBMITTED BY - SRINIVAS MAHARANA

ROLL NO-CH2414097

DECLARATION

I do here by declare that the project work "ATOMIC PHYSICS" is the detailed review work carried out by me independently under guidance and supervision of **Mr. Pradyumna Madhei** head of department of physics submitted partial fulfilment of discipline specific elective-4 ,6thsemester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.


Srinivas Maharana

Roll No- CH2414097

VISCOSITY

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY – SUBHAM NAHAK

ROLL NUMBER - CH2414098

GUIDED BY - SMT. ARATI DIXIT

LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS
GOVERNMENT SCIENCE COLLEGE,
CHATRAPUR

DECLARATION

I do hereby declares that the project work "SUBHAM NAHAK" is the detailed review work carried out by me independently under guidance and supervision of SMT.ARATI DIXIT, Lecturer in Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

Subham Nahak

NAME:- SUBHAM NAHAK

ROLL NO.:- CH2414098

GOVERNMENT SCIENCE COLLEGE COLLEGE



(CHATRAPUR, GANJAM, ODISHA)
AFFILIATED BY- BERHAMPUR UNIVERSITY

NANOSENSOR



PROJECT **REPORT** DSE.4,6TH SEMISTER.
GUIDED BY –MR .PRADYUMNA MADHEI
SUBMITTED BY – SUBHAM STHI
ROLL NO- CH2414099



DECLARATION

I do hereby declare that the project work "NANOSENSORS" is the detailed review work carried out by me independently under guidance of Mr. Pradyumna Madhei head of department of physics submitted partial fulfilment of discipline specific elective-4,6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before

Subham Sethi

Subham Sethi

Roll no.-CH2414099

WIRELESS POWER TRANSFER USING LASER

PROJECT REPORT (DSE-04), 6TH SEMESTER

SUBMITTED BY- SUSHIL PRADHAN

ROLL NUMBER- CH2414100

GUIDED BY-

PRADYUMNA MADHEI

LECTURER IN PHYSICS



DEPARTMENT OF PHYSICS

GOVERNMENT SCIENCE COLLEGE, CHATRAPUR

DECLARATION

I do hereby declares that the project work "**WIRELESS POWER TRANSFER USING LASER**" is the detailed review work carried out by me independently under guidance and supervision of **SMT.ARATI DIXIT**, Lecturer in Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

NAME: SUSHIL PRADHAN

ROLL NO: - CH2414100

x Sushil Pradhan

GOVERNMENT SCIENCE COLLEGE CHATRAPUR, GANJAM



UNIVERSAL GRAVITATION

[PROJECT REPORT (DSE -4), 6TH SEMESTER]

SUBMITTED BY :- T SHANKAR

ROLL NUMBER :- CH2414101

**GUIDED BY :- PRADYUMNA MADHEI
HEAD OF DEPARTMENT OF PHYSICS**

DECLARATION

I do hereby declares that the project work "UNIVERSAL GRAVITATION" is the detailed review work carried out by me independently under guidance and supervision of Mr. PRADYUMNA MADHEI, Lecturer in Physics submitted partial fulfillment of discipline specific elective-4, 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else before.

T. Shankar

NAME:- T SHANKAR
ROLL NO. :- CH2414101

ARCHIMEDES PRINCIPAL

(PROJECT REPORT DSE-4, 6TH SEMESTER)

SUBMITTED BY
TANMAYA PRADHAN
[BSc Final Year]

REGD. NO- 03717/2023
ROLL NO- CH2414102

GUIDED BY
PRADYUMNA MADHEI
(HEAD OF DEPARTMENT OF PHYSICS)



DEPARTMENT OF PHYSICS
GOVT. SCIENCE COLLEGE CHATRAPUR
GANJAM, ODISHA

DECLARATION

I **Tanmaya Pradhan** from Bsc. Final Year do here by declare that the project work entitled "**Archimedes Principal**" is the detailed review work carried out by me independently under the guidance and supervision of **Pradyumna Madhei**, Head of Department of physics submitted as partial fulfillment of Discipline Specific Elective 6th semester 2026 in physics, Berhampur University, Berhampur and has not been submitted anywhere else Before.

Tanmaya Pradhan

TANMAYA PRADHAN

CH2414102