

EARTHQUAKE DETECTOR

PROJECT REPORT

*Submitted to University of Kerala in partial fulfillment of the requirements for the
award of the degree of*

BACHELOR OF SCIENCE

In

PHYSICS

By

SIVAKUMAR.S -U1612020

VIDHYA V S -U1612023

VAISAKH K S -U1612055

Under the Guidance of

VIMALA.V

(Head of the department of Physics)



DEPARTMENT OF PHYSICS

FATIMA MATA NATIONAL COLLEGE (AUTONOMOUS)

CERTIFICATE

This is to certify that the project report entitled 'EARTHQUAKE DETECTOR' submitted by Reg nos.U1612020,U1612023,U1612055 to the university of Kerala in partial fulfillment of the requirements for the award of the degree Bachelor of Science in Physics is a bonafide record of work carried out by her under my guidance and supervision. The content of this report, in full or in parts, have not been submitted to any other institute or University for the award of any Degree.

Project Guide


VIMALA V

Head of Dept. Of Physics

FMNC Kollam

Head of the Department


Ms. VIMALA V

External Examiners

1.

ELECTRONIC LETTER BOX

(A project report submitted in partial fulfilment of the requirements for the award of degree
of Bachelor of Science in physics)

FATIMA MATA NATIONAL COLLEGE



Submitted by

BINDHUJA BALACHANDRAN	U1612010
LINI R	U1612042
REMYA KURIAKOSE	U1612047

Under the guidance and supervision of

Mr SUNIL A

CERTIFICATION

This is to certify that the project work entitled “**Electronic Letter Box**” submitted by Kum **BINDHUJA BALACHANDRAN**, Kum **REMYA KURIAKOSE AND** Kum **LINI R** towards partial fulfilment of the requirements for the award of the B.Sc. PHYSICS (6th semester) is carried out by her under my supervision and guidance.



Mr SUNIL. A

Project guide



Ms V VIMALA

Head of the department

FMNC, Kollam

Examiners

1)

2)

SUN TRACKING SOLAR PANEL

PROJECT REPORT

Bachelor of Science(Physics)

Submitted

By

NITHIN-REG NO: U1612016

MERITTA JAMES-REG NO U1612043

NIKHIL MOHAN S-REG NO U1612044

Under the guidance of

Ms LEEGIA D

Guest lecturer

Department of Physics



FMN COLLEGE (AUTONOMOUS), KOLLAM

Fatima Mata National College (Autonomous)
Kollam, Kerala, India



Department of Physics
CERTIFICATE

This is to certify that the project report 'SUN TRACKING SOLAR PANEL' is an authentic record of the project work carried out by NITHIN A(U1612016), MERITTA JAMES(U1612043), NIKHIL MOHAN S(U1612044) in FMN College, Kollam under the guidance and supervision of Ms. Leegia D, Guest Lecturer in Physics, F.M.N College.

Guide

Ms Leegia D

Guest Lecturer

Department of Physics

FMN College, Kollam.

Head of the Department

Ms Vithala V

Associate Professor

Department of Physics

F.M.N College, Kollam.

Examiner 1

Examiner 2

LPG LEAKAGE DETECTOR
PROJECT REPORT

Submitted to Fatima Mata National College (Autonomous)

In partial fulfillment of the requirement of award of

Degree Bachelor of Science

IN

PHYSICS

BY

ANJANA RAJENDRAN: U1612026

ANUJA J ANIL: U1612028

ATHIRA SURESH B: U1612033

Under the guidance of

Mr. IGNATIUS J

DEPARTMENT OF PHYSICS



FATIMA MATA NATIONAL COLLEGE

(AUTONOMOUS)

KOLLAM -691001

CERTIFICATE

This is to certify that the project report entitled "LPG LEAKAGE DETECTOR" is an authentic record of project work done by ANJANA RAJENDRAN, ANUJA J ANIL, ATHIRA SURESH .B, under the supervision of IGNATIUS.J in physics ,F.M.N.College, Kollam in partial fulfilment of Bachelor of Science in Physics under the faculty of Science of F.M.N. College (Autonomous)Kollam.



Mr. IGNATIUS J

Assistant Professor

Department of Physics

F.M.N College (Autonomous)

Kollam



Ms.VIMALA V

Head of the Department

Department of physics

F.M.N College

(Autonomous), Kollam

EXAMINERS

- 1.
- 2.

AUTOMATIC WATER LEVELCONTROLLER PROJECT REPORT

*Submitted in partial fulfilment of the requirement of the award of
degree of*

BACHELOR OF SCIENCE

In

PHYSICS

During the academic year 2016-2019

By

GOPIKA NATH S (Reg. No: U1612036)

HARITHA LAL (Reg. No: U1612037)

SILPA CHANDRAN (Reg. No: U1612052)

Under the guidance of

VIMALA.V

(Associate professor in physics)



**DEPARTMENT OF PHYSICS
FATIMA MATA NATIONAL COLLEGE
(AUTONOMOUS)
KOLLAM**

Fatima Mata National College(Autonomous)

Kollam, Kerala, India



CERTIFICATE

This is to certify that the project report entitled "AUTOMATIC WATER LEVEL CONTROLLER" submitted by **GOPIKA NATH S (U1612036), HARITHA LAL (U1612037), SILPA CHANDRAN (U1612052)** in partial fulfilment for the award of degree of science in Physics is a bonafide record of the project work by her under my guidance during the sixth semester.

Project Guide


VIMALA.V

Associate Professor

Dept. of Physics

Head of the department


VIMALA. V

Associate professor

Dept. of Physics

External Invigilator

1.

2.

INFRARED SENSOR

Project report

Submitted to Fatima Mata National college

***In the partial fulfillment of the requirements for
The award of the degree of bachelor of science***

IN

PHYSICS

BY

KRIPA V U1612039

ALEX K U1612025

Under the guidance of PATRIC VINCENT LOBO

Guest lecture, Department of physics



FATIMA MATA NATIONAL COLLEGE [AUTONOMOUS]

KOLLAM

DEPARTMENT OF PHYSICS

CERTIFICATE

This is to certify that the project report "INFRARED SENSOR" is an authentic record of the project work carried out by KRIPA V [U1612039] ,ALEX K [U1612025] Fatima Mata National College Kollam under the supervision and guidance of Mr. PATRIC VINCENT LOBO , Guest lecturer in Physics, Fatima Mata National College, Kollam in partial fulfillment of the requirement of the Bachelor of science in physics under the faculty of science of university of Kerala



Mr. PATRIC VINCENT LOBO

[Guide]

Guest Lecturer

Department of Physics

FMN College, Kollam



Ms. V. VIMALA

Head of the department

Department of physics

FMN College, Kollam

Examiners

1.

2.

PROJECT REPORT

Submitted in the partial fulfilment towards the requirement for the award of
Bachelor of Science Degree in Physics

Submitted by

Nikita Maria George

Reg No: U1612003

Deepa R

Reg No: U1612011

Joji Joseph


Reg No: U1612012

DEPARTMENT OF PHYSICS
FATIMA MATA NATIONAL COLLEGE
KOLLAM, KERALA
2016-2019

CERTIFICATE

This is to certify that this project report entitled "BAND GAP ENERGY OF A SEMICONDUCTOR" is bonafide record of the work done by Nikita Maria George, Joji Joseph and Deepa R in the department of Physics under my supervision and guidance towards the partial fulfilment for the award of degree of Bachelor of Science in Physics of University of Kerala during the academic year 2018-2019.

 Project guide
Ms Leegia D

Head of the Department 

Dr.V.Vimala

External Examiners

1.

2.

FATIMA MATA NATIONAL COLLEGE

(AUTONOMOUS)

Kollam-691001



PROJECT REPORT ON
**"GRAVITATIONAL FIELD OF A POINT MASS:
SCHWARZCHILD METRIC"**

Submitted to Fatima Mata National College (Autonomous) in partial
fulfilment of the requirement for the award of the Degree of
Bachelor of Science in Physics

Submitted by:

AMITHA TERESA : (U1612001)
ARUN G : (U1612030)
LIMA FELIX : (U1612040)

Under the guidance of:

Dr.SHEENA MARY Y
DEPARTMENT OF PHYSICS
FATIMA MATA NATIONAL COLLEGE



CERTIFICATE

This is to certify that this project work on "**GRAVITATIONAL FIELD OF A POINT MASS: SCHWARZCHILD METRIC**" was done by Amitha Teresa(Reg No.U1612001), Arun G(Reg No.U1612030) and Lima Felix(Reg No.U1612040) at Fatima Mata National College, Kollam in partial fulfilment of the Bachelor degree of science in Physics during the period 2016-2019.

Project guide

Dr. Sheena Mary Y

Head of Department

Ms. Vimala V

External Examiners

1.

2.

AUTOMATIC HEAD LIGHT SWITCHER

PROJECT REPORT

*Submitted in partial fulfillment of the requirement of the award
of degree of*

BACHELOR OF SCIENCE

IN

PHYSICS

by

ATHIRA PRASAD (U1612031)

ATHIRA RAJENDRAN (U1612032)

ROBIN R (U1612048)



DEPARTMENT OF PHYSICS
FATIMA MATA NATIONAL COLLEGE
(AUTONOMOUS)

Kollam-691001

April-2019

Fatima Mata National College (Autonomous)

Kollam, Kerala, India



CERTIFICATE

This is to certify that the project report entitled "AUTOMATIC HEAD LIGHT SWITCHER" submitted by ATHIRA PRASAD,ATHIRA RAJENDRAN,ROBIN R in partial fulfillment for the award of Degree of Science in Physics is a bonafide record of the project work by her under my guidance during the sixth semester.

Project guide



SUNIL A

Assistant Professor
Dept. of Physics

Head of the Department



Ms. V. Vimala
Associate professor
Dept. of Physics

Examiners : 1) _____

2) _____

**“STUDY OF EXTERNAL GAMMA DOSE IN THE ALAPPAD
PANCHAYATH OF KOLLAM DISTRICT, KERALA”**

PROJECT REPORT

**Submitted to Fatima Mata National College (Autonomous) in
partial fulfilment of the requirement for the award of the Degree of
Bachelor of Science**

IN

PHYSICS

By

MEGHA BABU : U1612015

S.GOPIKA :U1612017

SARIGA.S.KUMAR :U1612050

Under the guidance of

Dr BEN BYJU

(Guest lecturer)

DEPARTMENT OF PHYSICS



FATIMA MATA NATIONAL COLLEGE (Autonomous)

Kollam -691001

CERTIFICATE

This is to certify that the project report entitled "STUDY OF EXTERNAL GAMMA DOSE IN THE ALAPPAD PANCHAYATH OF KOLLAM DISTRICT, KERALA" is an authentic record of project work done by MEGHA BABU, S.GOPIKA AND SARIGA.S.KUMAR under the supervision and guidance of Dr.BEN BYJU in physics, F.M.N. College, Kollam in partial fulfilment of Bachelor of Science in physics under the faculty of science of Fatima Mata National college (autonomous) Kollam.



Dr BEN BYJU

Guest Lecturer

Department of Physics

F.M.N College

(Autonomous), Kollam



Ms Vimala V

Head of the Department

Department of Physics

F.M.N College

(Autonomous), Kollam

EXAMINERS

- 1.
- 2.

“METAL DETECTOR”

PROJECT REPORT

**Submitted to Fatima Mata National College (Autonomous)
in partial fulfilment of the requirement for the award of
the Degree of Bachelor of Science**

IN

PHYSICS

By

AKHILA PRASAD : U1612008

S. AKHIL : U1612049

GOPIKA .B.R. : U1612035

Under the guidance of

DR.BENZON K.B.

(Guest lecturer)

DEPARTMENT OF PHYSICS



FATIMA MATA NATIONAL COLLEGE

(AUTONOMOUS)

KOLLAM - 691001

CERTIFICATE

This is to certify that the project report entitled "METAL DETECTOR" is an authentic record of project work done by AKHILA PRASAD, SAKHIL AND GOPIKA.B.R under the supervision and guidance of Dr. BENZON K. B. in Physics, F.M.N.College, Kollam in partial fulfilment of Bachelor of Science in Physics under the faculty of Science of F.M.N.College (autonomous) Kollam.

For

Dr.Benzon K.B.

Guest Lecturer

Department of Physics

F.M.N.College

(Autonomous), Kollam



Ms.Vimala V.

Head of the Department

Department of Physics

F.M.N.College

(Autonomous), Kollam

EXAMINERS

1.

2.

“MICRO INVERTER”

PROJECT REPORT

**Submitted to Fatima Mata National College (Autonomous)
in partial fulfilment of the requirement for the award of
the Degree of Bachelor of Science**

IN

PHYSICS

By

SANDEEP SALTON : U1612005
ANCY OUSEPH : U1612009
PRESITHA PRENRAJ : U1612045

Under the guidance of

DR.BENZON K.B.
(Guest lecturer)
DEPARTMENT OF PHYSICS



**FATIMA MATA NATIONAL COLLEGE
(AUTONOMOUS)
KOLLAM – 691001**


CERTIFICATE

This is to certify that the project report entitled "MICRO INVERTER" is an authentic record of project work done by SANDEEP SALTON, ANCY OUSEPH AND PRESITHA PRENRAJ under the supervision and guidance of Dr. BENZON K. B. in physics, F.M.N. college, Kollam in partial fulfilment of bachelor of science in physics under the faculty of science of F.M.N. college (autonomous) Kollam.

For

Dr. Benzon K.B.
Guest Lecturer
Department of Physics
F.M.N. College
(Autonomous), Kollam




Ms. Vimala V.
Head of the Department
Department of Physics
F.M.N. College
(Autonomous), Kollam

EXAMINERS

- 1.
- 2.

AUTOMATIC STREET LIGHT

PROJECT REPORT

*Submitted to the Fatima Mata National College
(Autonomous) in partial fulfillment of the requirements of the
award of degree of Bachelor of Science in*

PHYSICS

By

TEENA THOMAS : U1612021

ARDRA.R : U1612029

LINCY FRANCIS : U1612041

Under the guidance of

Dr. Sheena Mary Y

Assistant professor

Department of Physics



FMN COLLEGE KOLLAM

April, 2019

FATIMA MATA NATIONAL COLLEGE

KOLLAM, KERALA



DEPARTMENT OF PHYSICS


CERTIFICATE

This is to certify that project report entitled "Automatic street light" is an authentic record of work carried out by **Teena Thomas (U1612021)**, **Ardra. R (U1612029)**, **Lincy Francis (U1612041)** during the period of their study in the department of Physics, Fatima Mata National College (Autonomous), Kollam, Under my supervision and guidance.

Ms. V. Vimala

Head of the Department of Physics

F.M.N COLLEGE, KOLLAM


Dr. Sheena Mary Y

The Project Advisor

Dept. of Physics

F.M.N COLLEGE, KOLLAM

Examiners

1

2

MOBILE PHONE DETECTOR

PROJECT REPORT

*Submitted in partial fulfillment of the requirement for the award
of the Degree of Bachelor of Science*

IN

PHYSICS

By

RAMOONA A : U1612046

SHABUNA SUNIL : U1612051

SRUTHI V : U1612054



**DEPARTMENT OF PHYSICS
FATIMA MATA NATIONAL COLLEGE**

(AUTONOMOUS)

Kollam-691001

April-2019

Fatima Mata National College (Autonomous)

Kollam, Kerala, India



CERTIFICATE

This is to certify that the project report entitled "MOBILE PHONE DETECTOR" submitted by RAMOONA.A, SHABUNA SUNIL & SRUTHI.V in partial fulfillment for the award of Degree of Science in Physics is a bonafide record of the project work by them under my guidance during the sixth semester.

Project guide

Ignatius. J
Assistant Professor
Dept. of Physics

Head of the Department

Ms. V. Vimala
Associate professor
Dept. of Physics

Examiners : 1) _____

2) _____