

DEPARTMENT OF PHYSICS
DEVA MATHA COLLEGE, KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



REPORT

of

ADD-ON COURSE

in

LED LIGHT – MECHANICAL ASSEMBLY

(Conducted for II DC Physics students)

Academic Year: 2018-19

Add-on Course in LED light - Mechanical Assembly

Duration: 30 hours

Number of students enrolled : 25

The Physics Department of Deva Matha College Kuravilangad has organised an Add-on Course in LED light - Mechanical Assembly for the II DC Physics students of the college. 25 students registered and successfully completed the course. The course was conducted during the months of November, December, January and February . Resource Persons who engaged the classes were renowned in the respective area. The course is of 30 hours duration with practical sessions.

Course Objectives

- To familiarize electronic components and the procedure of soldering
- To provide fundamental understanding of LED
- To practice the knowledge gained in assembling various LED luminaries such as LED bulb, LED tube light etc.

Syllabus

Module 1 (2 hrs)

Introduction and understanding safety procedure & preventive measures against electrical accidents

Module 2 (4 hrs)

Awareness of electronic components, pick & place process, soldering

Module 3 (10 hrs)

Hobby circuit design and assembling – Clap Switch, Burglar Alarm, Water Level Indicator, Automatic Night Lamp

Module 4 (4 hrs)

LED Basics : Operating voltage & current, Thermal Management, Array configuration

Module 5 (10 hrs)

Driver selection & All the aspects related to LED Luminary Assembly

Course Outcome

- The students get a rigorous idea about various electronic components and the procedure of soldering.
- The students acquire basic understanding of the principle behind light emitting diode.
- The students get hands-on training in assembling various LED luminaries such as LED bulb, LED tube light etc. that promotes their employability and entrepreneurial skills.

Mode of Evaluation

Attendance and Examination

List of Students Enrolled

| Sl. No. | Class No. | Name | Department |
|---------|-----------|-------------------|-------------|
| 1 | 215 | ABEL SAJI | CHEMISTRY |
| 2 | 217 | ALWIN GEORGE | " |
| 3 | 219 | AMAL MURALI | " |
| 4 | 221 | ANANDAKRISHNAN H | " |
| 5 | 512 | ADARSH MATHEW | " |
| 6 | 517 | ALBIN M SEBASTIAN | ECONOMICS |
| 7 | 539 | DIMPLE CHERIYAN | " |
| 8 | 521 | JITTO MATHEW | " |
| 9 | 525 | SAURAFKUMAR P | " |
| 10 | 526 | SAVIO BENNY | " |
| 11 | 549 | SREEHARI M S | " |
| 12 | 619 | AMAL ISSAC | ENGLISH |
| 13 | 702 | AJITH K S | MALAYALAM |
| 14 | 704 | JOMY SEBASTIAN | " |
| 15 | 12 | ALBIN THOMAS | MATHEMATICS |
| 16 | 16 | ASHIK RAJEEV | " |
| 17 | 130 | RISHI KISHORE | PHYSICS |
| 18 | 116 | DIBIN DOMINIC | " |
| 19 | 114 | BOBBY MATHEW | " |
| 20 | 463 | ANANDHU K S | ZOOLOGY |
| 21 | 407 | ANUMARIA BENNY | " |
| 22 | 412 | ASWATHY T N | " |
| 23 | 456 | ASWIN ROY | " |
| 24 | 421 | SANGEETHA FRANCIS | " |

Photo



Marklist

| Sl. No. | Class No. | Name | Marks |
|---------|-----------|-------------------|-------|
| | | | 25/25 |
| 1 | 215 | ABEL SAJI | 24/25 |
| 2 | 217 | ALWIN GEORGE | 24/25 |
| 3 | 219 | AMAL MURALI | 25/25 |
| 4 | 221 | ANANDAKRISHNAN H | 25/25 |
| 5 | 512 | ADARSH MATHEW | 25/25 |
| 6 | 517 | ALBIN M SEBASTIAN | 24/25 |
| 7 | 539 | DIMPLE CHERIYAN | 25/25 |
| 8 | 521 | JITTO MATHEW | 24/25 |
| 9 | 525 | SAURAFKUMAR P | 24/25 |
| 10 | 526 | SAVIO BENNY | 24/25 |
| 11 | 549 | SREEHARI M S | 25/25 |
| 12 | 619 | AMAL ISSAC | 25/25 |
| 13 | 702 | AJITH K S | 24/25 |
| 14 | 704 | JOMY SEBASTIAN | 25/25 |
| 15 | 12 | ALBIN THOMAS | 24/25 |
| 16 | 16 | ASHIK RAJEEV | 24/25 |
| 17 | 130 | RISHI KISHORE | 25/25 |
| 18 | 116 | DIBIN DOMINIC | 24/25 |
| 19 | 114 | BOBBY MATHEW | 25/25 |
| 20 | 463 | ANANDHU K S | 25/25 |
| 21 | 407 | ANUMARIA BENNY | 24/25 |
| 22 | 412 | ASWATHY T N | 24/25 |
| 23 | 456 | ASWIN ROY | 24/25 |
| 24 | 421 | SANGEETHA FRANCIS | 24/25 |
| 25 | 336 | ANUMOL SANTHOSH | 24/25 |

DEVA MATHA COLLEGE KURAVILANGAD

A NAAC Re-Accredited 'A' Grade College

Website: www.devamatha.ac.in , E-Mail: principaldmck@gmail.com



Add-on Course Certificate

This is to certify that DIBIN DOMINIC Department of
PHYSICS has successfully completed the short term Multi-disciplinary Add-on-Course
titled: LED LIGHT, Mechanical Assembly
conducted by the Department of PHYSICS during the academic year 2018-2019.

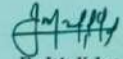
He/She has passed the add-on course with A Grade.

Kuravilangad
July 2019




General Co-ordinator


Department Co-ordinator


Dr. Jojo K Joseph
Principal





Dr. Saritha K Jose

Add-on Course Coordinator

Department of Physics





Principal

Deva Matha College
Kuravilangad - 686 633