# 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 : 2023-2024



# Add-on Course in

# DMCK/PHY/AD23/2021 : LED light - Mechanical Assembly

Duration: 30 hours

Number of students enrolled : 16

#### **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.

## <u>Syllabus</u>

## 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
1	22UG251	ARATHI RAJEEV
2	22UG252	ASHNA SUNNY
3	22UG253	KEVIN PETER BABU
4	22UG254	<u>SREENANDA</u> R NAIR
5	22UG256	ADITHYASANKAR L
6	22UG257	<u>AISWARYA</u> THAMPI
7	22UG258	AISWARYA LAKSHMI P
8	22UG259	AMRUTHA BABU
9	22UG260	<u>ARJUN</u> P M
10	22UG261	ARSHA SIBY
11	22UG262	<u>DEEPIKA</u> NAIR D
12	22UG263	<u>GAYATHRI</u> DEVI N R
13	22UG264	HARIPRIYA M
14	22UG265	J <u>AYALAKSHMI</u> L J
15	22UG266	NANDANA GIREESH
16	22UG267	<u>SUMITH</u> K S



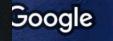






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**Attendance Sheet** 

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DEVA MATHA COLLEGE KURAVILANGAD ADD ON COURSE FOR II DC PHYSICS 2023-2024 LED LIGHT – MECHANICAL ASSEMBLY



Timestamp	1. Name	2. Class No.	3. How do you rate the	4. How do you rate the	5. How do you rate the
			course as a whole?	co-ordination of the course	usefulness of this course?
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3/27/2024 10:47:32	ARATHI RAJEEV	22UG251	5	5	5
3/27/2024 12:02:24	ASHNA SUNNY	22UG252	5	5	5
3/27/2024 16:24:50	<u>KEVIN</u> PETER BABU	22UG253	5	5	5
3/27/2024	SREENANDA R	22UG254	5	5	5
12:36:31	NAIR	2200234	5	5	5
3/27/2024 14:18:36	<u>ADITHYASANKAR</u> L	22UG256	5	5	5
3/27/2024	AISWARYA	22UG257	5	5	5
16:24:50	THAMPI				
3/27/2024	AISWARYA	22UG258	5	5	5
17:27:53	<u>LAK</u> SHMI P				
3/27/2024 17:29:30	<u>AMRUTHA</u> BABU	22UG259	3	5	4
3/27/2024 12:36:31	<u>ARJUN</u> P M	22UG260	5	5	5
3/27/2024 17:55:35	<u>ARSHA</u> SIBY	22UG261	5	5	5
3/27/2024 18:31:35	<u>DEEPIKA</u> NAIR D	22UG262	2	1	1
3/27/2024 19:48:44	<u>GAYATHRI</u> DEVI N R	22UG263	4	5	4
3/27/2024 20:17:57	<u>HARIPRIYA</u> M	22UG264	5	5	5
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22:30:24	<u>NANDANA</u> GIREESH	2200200			5
3/27/2024		22UG267	5	5	5
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## Feedback Form of 'LED Light – Mechanical Assembly'



#### Exam Marklist

Sl. No.	Name	Class No.	Score
1	ARATHI RAJEEV	22UG251	30/30
2	ASHNA SUNNY	22UG252	29/30
3	<u>KEVIN</u> PETER BABU	22UG253	28/30
4	<u>SREENANDA</u> R NAIR	22UG254	30/30
5	<u>ADITHYASANKAR</u> L	22UG256	28/30
6	<u>AISWARYA</u> THAMPI	22UG257	30/30
7	<u>AISWARYA LAK</u> SHMI P	22UG258	30/30
8	AMRUTHA BABU	22UG259	28/30
9	<u>ARJUN</u> P M	22UG260	30/30
10	ARSHA SIBY	22UG261	30/30
11	<u>DEEPIKA</u> NAIR D	22UG262	30/30
12	<u>GAYATHRI</u> DEVI N R	22UG263	27/30
13	HARIPRIYA M	22UG264	30/30
14	<u>JAYALAKSHMI</u> L J	22UG265	29/30
15	NANDANA GIREESH	22UG266	28/30
16	<u>SUMITH</u> K S	22UG267	30/30



