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



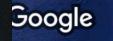






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Kuravilangad, Kerala, India Deva Matha College, QH47+G4W, SH 1, Kuravilangad, Kerala 686633, India Lat 9.756498° Long 76.562695° 13/02/23 01:26 PM GMT +05:30







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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				Department	
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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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22:13:01 3/27/2024		22UG266	5	5	5
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



