

Andhra Christian college
GUNTUR
DEPARTMENT OF PHYSICS

Date: 10-11-2020

NOTICE

It is Notified for All concerned that Andhra Christian College, Guntur, is going to start a Certificate course on "LED BULB ASSEMBLING, USAGE & APPLICATIONS" very soon for 1st B.Sc, 2nd B.Sc & 3rd B.Sc students for their benefits in the near future.

The last date of enrolment is: 14th Nov,2020

Course Coordinator: **Dr. M. Ratna Raju**, Lecturer, Department of Physics

Note:

1. The course is free of cost and the successful candidates will be issued certificates by college which will help them in future.
2. Admission is on First come First Serve Basis. Number of seats is limited.


Head of the Department
(Department of physics)
Department of Physics
A.C. College Guntur.


PRINCIPAL
ANDHRA CHRISTIAN COLLEGE
(Day, Evening & P.G)
GUNTUR
Principal

CERTIFICATE COURSE 2020-21

Department Conducts a Certificate course on “LED BULB ASSEMBLING, USAGE AND APPLICATIONS”. The Duration of the Course is 30 hours. This course will provide the students an idea of basics of LED bulbs and practical sessions on assembling and service of LED bulbs.

SYLLABUS

MODULE I

10 hours

Diodes- basic concepts, Biasing-forward bias and reverse bias, Introduction to LEDs, Semiconductor LEDs- How do they Work, LED’s basic theory, LED Voltage and current, Advantages and disadvantages of LED

MODULE II

10 hours

Multicolour LEDs, White LED, Physics of White LED, White LED no heat, Blue LED- History of Revolutions, LEDs Lighting and Potential for energy savings, Applications of LEDs- Power indicator, seven segment display, why LED lights so good, Organic LEDs

MODULE III – Practical Session

10 hours

How to assemble LED bulbs, Discussion of the circuits, Fabrication of the LED bulbs

Text book for study

1. Principles of Electronics- V.K Metha-S. Chand Publication
2. Principles and Applications of Organic Light Emitting Diodes (OLEDs)- Thejo Kalyani, Hendrik Swart and S.J.Dhoble-Wiley Publication
3. Understanding LED Illumination – M. Nisa Khan
4. Integrated Electronics- Jacob Millman,Christos Halkias,Chetan D. Parikh- second edition

contact@mtcc.ac.in