DEPARTMENT OF PHYSICS (S.F.) DEVA MATHA COLLEGE, KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



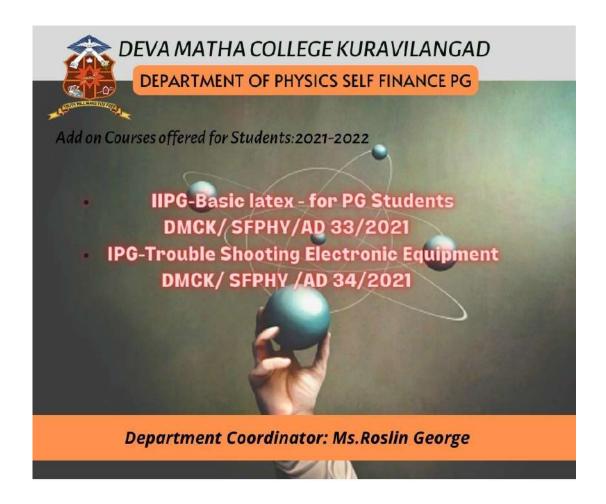
Syllabus

ADD-ON COURSE

In

TROUBLESHOOTING AND MAINTENANCE OF ELECTRONIC EQUIPMENTS

Academic Year: 2021-22



Academic Year: 2021-22

Beneficiaries: I PG Physics

Number of teachers coordinated:1

Number of Students participated:16

Total Instructional hours: 30

Course code: DMCK/ SFPHY /AD 34/2021

Syllabus

Course Objectives

- 1. Acquire working knowledge in electronic circuits
- 2. To develop the method for the study of different circuits
- 3. To familiarize the basic electronic equipment

Course Syllabus Total hours: 30

Module 1 (15hours)

Introduction to linear power supplies, Linear Power suppliestroubleshooting of power supply circuit, Analysis, planning, measurement, effect of an open diode in a half wave rectifier, Effect of an open diode in a full wave rectifier, Effects of a faulty filter capacitor, effect of a faulty transformer.

Module 2 (15hours)

SMPS – Working, advantages and disadvantages, comparison of linear regulator vs SMPS, Linear power supplies, working, applications, advantages and disadvantages, how to build a linear power supply- designing (3 types)

Assessment Procedure:

Test- 80 Marks Assignment-20 Marks

Grading:

Above 80%	A
60%-80%	В
Below 60%	С

Course Outcomes

- Students will demonstrate various electronic circuits
- Solve the errors in various equipment
- Student will demonstrate an ability to identify the components and
- circuit elements in various electronic devices
- Students will be able to apply the practical knowledge for constructing a circuit

TIPAVILANCE

Principal
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Kuravilangad - 686 633