

**MICROWAVE AND OPTICAL COMMUNICATIONS LABORATORY**

**IV B.Tech. I Semester**

**Course Code: A227493**

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**COURSE OBJECTIVES**

At the end of the Course, the students able to

1. Understand the behavioral aspects of various microwave sources
2. Analyze the measurement procedures of important parameters in microwave engineering.
3. Evaluate the S-Parameters of various three and four port devices
4. Understand the characteristics of various optical sources.
5. Measure the losses, intensity modulation for the analog optical fiber and data rate for digital Optical fiber.

**Note:** Any 12 of the following experiments

**LIST OF EXPERIMENTS:**

1. Reflex Klystron Characteristics
2. Gunn Diode Characteristics
3. Directional Coupler Characteristics
4. VSWR Measurement
5. Measurement of Waveguide Parameters
6. Measurement of Scattering parameters of a Magic Tee
7. Measurement of Scattering parameters of a Circulator
8. Attenuation Measurement
9. Characterization of LED.
10. Characterization of Laser Diode.
11. Intensity modulation of Laser output through an optical fiber.
12. Measurement of Data rate for Digital Optical link.
13. Measurement of Numerical Aperture of fiber cable.
14. Measurement of losses for Optical link