

Laboratory Name: Optical Laboratory
Laboratory In-Charge: Dr. J. Josephine Pon Gloria

Venue: 1431
Qualification: M.E., Ph.D.,

TECHNICAL MANPOWER

Laboratory Assistant: Mr. M. Bharath Kumar
Qualification: Diploma in Electronics (Robotics)

LABORATORY SPACE AND STUDENT ALLOCATION

Area of the Laboratory : 80 sq.m
No. of students per session : 10
Batch Size : 3 students / batch
Weekly Utilization Status : 28 hours / week

DESCRIPTION ABOUT THE LABORATORY

The Optical Laboratory is furnished with advanced optical fiber kits that facilitate the study of numerical aperture, attenuation measurements, and the transmission characteristics of both analog and digital signals. Students are trained to evaluate the performance of optical sources and detectors, gaining insights into real-world fiber optic communication systems.

COST OF THE LABORATORY

Total cost of equipment : Rs. 10,76,459.00
Total cost of consumables : Rs. 64,965.00
Overall cost of the Laboratory : Rs. 11,41,424

OBJECTIVES

- To bridge the gap between theoretical knowledge and practical applications in optical and microwave engineering.
- To study and analyze the characteristics of optical fibers, including numerical aperture and attenuation.
- To evaluate the performance of optical sources and detectors.



Laser Trainer Kit

ADDITIONAL FACILITY

Equipment Name
Laser Trainer Kit
Cost of the Equipment
Rs. 1,33,192.50
Date of Purchase
03.11.2017



850 nm LED and PIN Photo Diode Module Fiber Optic Analog Link

LIST OF MAJOR EQUIPMENT

S.No	Equipment Name	Quantity	Cost (Rs.)
1	Link-B Advanced Fiber Optic Kit	8	4,07,262
2	Fiber Optic Communication Trainer Kit Link-A	4	1,14,240
3	Laser Trainer Kit Link-E	4	1,93,487.50
4	850 nm PIN Photo Diode Module Fiber Optic Analog Link	3	31,248
5	850 nm LED Module Fiber Optic Analog Link	3	31,248
Total Cost			7,77,486



Link-E Laser Trainer Kit



Fiber Optic Communication Trainer kit Link A



Link-B Advanced Fiber Optic Kit