



B. P. Poddar Institute of Management & Technology
Department of Electronics & Communication Engineering



Academic Year: 2018-2019, Semester: Odd

Laboratory Name: Dr. N.S. Kapany Lab. Room No.: B – 601

4 ECE 1st Semester

Course Name: Optical Communication & Network Lab (EC- 793B)

List of Experiments to be conducted

| Sl. No. | Topic | Name of Experiment | CO | PO | PSO |
|----------------|-----------------------------------|--|-----------|--------------------------|------------|
| 1 | Fiber Loss | Measurement of signal attenuation within an optical fiber. | 1 | 1, 2, 5, 8, 9, 10 12 | 1, 2 |
| 2 | Fiber Loss | Study of frequency division multiplexing in a fiber-optic analog communication system and calculation of bending loss of an optical fiber. | 1 | 1, 2, 5, 8, 9, 10 12 | 1, 2 |
| 3 | Fiber Loss | Measurement of various attenuations of a long optical fiber using optical time domain reflector-meter (OTDR). | 1 | 1, 2, 5, 8, 9, 10 12 | 1, 2 |
| 4 | Light Collecting Ability of Fiber | Measurement of numerical aperture of an optical fiber. | 2 | 1, 2, 5, 8, 9, 10 12 | 1, 2 |
| 5 | LED | Study of electrical characteristics of light emitting diodes. | 3.4 | 1, 2, 8, 9, 10 12 | 1, 2 |
| 6 | Additional Experiment | Design of an Optical Fiber Communication System using OptiSystem Software. | 5 | 1, 2, 3, 5, 8, 9, 10 12 | 1, 2 |
| 7 | Virtual Lab Experiment | To determine the wavelength of a laser using Michelson interferometer. | | 1, 2, 3, 5, 8, 9, 10, 12 | 1,2 |