ANNEXURE – V

SCHEDULE OF TRAINING PROGRAMME

a) Subject Code : EC 6702

b) Subject Name : Optical Communication and Networks

c) Branch : ECE

d) Semester : VII

DATE/ DAY	9:00AM-10:30AM		10:45AM-12:45PM		1:30PM-:3.00PM		3:10PM-4:00PM
31.05.17 WED	**Evolution & Introduction to Fibers** Element of an Optical Fiber Transmission link **(Dr. K . Chitra)**	**B R E A K**	**Evolution & Introduction to Fibers** Total internal reflection, Acceptance angle, Numerical aperture, Skew rays Ray Optics **(Dr. K. Chitra)**	**L U N C H**	**Mode theory of Circular Waveguides** Optical Fiber Modes and Configurations, Mode theory of Circular Wave guides **(Ms. M. Methini)**	**B R E A K**	**Mode theory of Circular Waveguides** Overview of Modes-Key Modal concepts, Linearly Polarized modes, Single Mode Fibers, Graded Index fiber structure **(Ms. M. Methini)**
01.06.17 THU	**Attenuation:** Attenuation, Absorption losses, Scattering losses, Bending Losses, Core and Cladding losses **(Dr. M. Palanivelan)**		**Attenuation:** Signal Distortion in Optical Wave guides-Information Capacity determination, Group Delay **(Dr. M. Palanivelan)**		**Dispersion:** Material Dispersion, Wave guide Dispersion- Signal distortion in SM fibers, Polarization Mode dispersion **(Ms. S. Brindha)**		**Dispersion:** Intermodal dispersion- Pulse Broadening in GI fibers-Mode Coupling, Design Optimization of SM fibers, RI profile and cut-off wavelength **(Mr. T. Ilavarasan)**

DATE / DAY	9:00AM-10:30AM		10:45AM-12:45PM		1:30PM-:3.00PM		3:10PM-4:00PM
02.06.17 FRI	**Optical Networks** Link Power budget, Rise time budget, Noise Effects on System Performance. **(Dr. M. Meenakshi)**		**Optical Networks** Operational Principles of WDM Performance of WDM, EDFA system, Solutions -Optical CDMA-Ultra High Capacity Networks. **(Dr. M. Meenakshi)**		**LED:** Direct and indirect Band gap materials, LED structures, Light source materials, Quantum efficiency and LED power, Modulation of a LED. **(Dr. A. Babiyloa)**		**LASER Diode**: Lasers Diodes- Modes and Threshold condition, Rate equations, External Quantum efficiency, Resonant frequencies. **(Dr. A. Babiyola)**
03.06.17 SAT	**Benchmark (Mr. RaviArunan)**	**B**	**Benchmark (Mr. RaviArunan)**	**L**	**Benchmark (Mr. RaviArunan)**	**B**	**Benchmark (Mr. RaviArunan)**
05.06.17 MON	**LASER Diode** Laser Diodes, Temperature effects, Introduction to Quantum laser. **(Mr. M. Baskaran)**	**R E A K**	**Fiber Amplifier and Coupling** Fiber amplifiers, Power Launching and coupling Lencing schemes, Fiber to Fiber joints, Fiber splicing, Signal to Noise ratio, Detector response time. **(Mr. M. Baskaran)**	**U N C H**	**Fiber Optic Receivers**: Fundamental receiver operation, Pre amplifiers, Error sources. **(Mr. K. Esakki Muthu)**	**R E A K**	**Fiber Optic Receivers**: Receiver Configuration- Probability of Error, Quantum limit Fiber. **(Mr. K. Esakki Muthu)**
06.06.17 TUE	**Measurements:** Attenuation Measurements, Dispersion, measurements. Fiber Refractive index profile measurements. **Ms. Josphine Ida Litrizia)**		**Optical Networks** Non linear effects on Network performance. **(Dr. G. Nagarajan)**		**Lab Session** **(Mr. T. Ilavarasan & Ms. K. Jeyapiriya)**		**Lab Session** **(Mr. T. Ilavarasan & Ms. K. Jeyapiriya)**
07.06.17 WED	**Optical Networks**: Basic Networks, SONET / SDH, Broadcast, and select WDM Networks **(Dr. Komala James)**		**Optical Networks** Wavelength Routed Networks **(Dr. Komala James)**		**Measurements:** Fiber cut-off wavelength measurements, Fiber numerical Aperture measurements. **(Dr. A. Siva Subramanian)**		**Measurements:** Fiber diameter measurements **(Dr. A. Siva Subramanian)**