

Year & Sem:	Course Code: EC4501	Course Name: Optical Communications	No. of Credits: 4	L 2	T&PS 2	P 0
Unit-I: Characteristics of optical transmission media. Unit-II: optical fibers - preparation and transmission characteristics, loss and dispersion mechanisms. Unit-III: optical sources - principles of operation, modulation characteristics and driver circuits, photo detectors, principles of operation. Unit-IV: circuits and performance post detection amplifiers, fiber optic communication systems and link budget using direct detection. Unit-V: fiber optic connectors, couplers, multiplexers and splices, wavelength converters, routers. Unit-VI: optical amplifiers, coherent and WDM systems. References/Text Books: 1. John M.Senior "Optical Fiber Communications" ,Pearson third edition,2010. 2. Gerd keiser " Optical Fiber Communications", Tata Mcgraw Hill , fourth edition,2010.. Lecture Plan: Unit-I & -II syllabus for MID-I, Unit-III & -IV syllabus for MID-II and Unit-V & -VI syllabus for MID-III examinations. Video Lectures (Web Links): 1. 2. Study Materials (Web Links): 1. 2. Problems & Solutions (Web Links): 1. 2. Assignments (Web Links): 1. 2.						