

**B Tech Electronics (Sem VII)**  
**Paper: EL-702 Photonics**

<b>Date</b>	<b>Topic</b>
20-23 July, 2016	Light as an electromagnetic waves, Concept of spherical waves
25-30 July, 2016	Reflection and Transmission, TOI, Brewster's law, Dispersion
1-6 August, 2016	Interference, Coherence, Division by wavefront and amplitude
8-13 August, 2016	Young's double slit, Thin film interference
16-20 August, 2016	Newton's ring and Michelson's interferometer
22-27 August, 2016	Diffraction, Fresnel and Fraunhofer, Diffraction Integral
29 Aug- 3 Sept 2016	Diffraction due to single slit
5-13 Sept 2016	Double slit and Grating
14 Sept 2016	Revision and group discussion
15 Sept 2016	1 <sup>st</sup> Internal Assessment (Syllabus: Unit I)
19-24 Sept 2016	Linear, Circular and Elliptical polarization, Malu's law
26-30 Sept 2016	Wave propagation , Half wave and quarter wave plates
3-8 Oct 2016	LED, Introduction of LASER
6 Oct 2016	2 <sup>nd</sup> Internal Assessment (Syllabus: Unit II)
17-22 October 2016	Einstein coefficients, Population Inversion, Threshold condition, Example of Lasers, Semiconductor Laser, Photodiodes
28 Oct 2016	3 <sup>rd</sup> Internal Assessment test (Syllabus: Unit III)
24-29 Oct 2016	Waveguides: TE and TM modes, Dispersion and group velocities
31 Oct -5 Nov 2016	Fiber optics: Introduction, TIR, single and multimode, attenuation and dispersion in optical fiber
7-12 Nov 2016	Revision, problem solving and group discussion