Lesson Plan Lesson Plan

**Name**: Parul Garg  **Practical**

**Subject**: Physics Monday Tueday (Group 1)

**Lesson Plan**: January 2018 – April 2018 Wednesday ,Thursday (Group 2)

 Friday, Saturday (Group 3)

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| Week | Date | B.Sc II Sem. (Semi conductor devices) | B.Sc IV Sem. (Optics) | B.Sc II Sem. Practical |
| 1 | 1-Jan-18 |  | Basic introduction of polarization | Introduction of M.O.I. using torsion pendulum |
| 2-Jan-18 |  | Malus law,phenomenon of double refraction | Experimental performance of torsion pendulum |
| 3-Jan-18 |  | Huygens theory of double refraction  | Introduction of M.O.I. using torsion pendulum |
| 4-Jan-18 | Introduction of semiconductor & its resistivity and carrier mobility |  | Experimental performance of torsion pendulum |
| 5-Jan-18 | Hall effect,pn junction diode & its characterstics |  | Introduction of M.O.I. using torsion pendulum |
| 6-Jan-18 | Zener diode & its applications  |  | Experimental performance of torsion pendulum |
| 7-Jan-18 | **Sunday** |
| 2 | 8-Jan-18 |  | Analysis of polarized light,nicol prism | Viva-voce(group discussion) |
| 9-Jan-18 |  | Quarter & half wave plate | File checking+doubts |
| 10-Jan-18 |  | Production & detection of plane polarized light | Viva-voce(group discussion) |
| 11-Jan-18 | LED,photoconduction ,photodiode of semiconductor |  | File checking+doubts |
| 12-Jan-18 | Solar cell,pn junction as rectifier,half wave rectifier |  | Viva-voce(group discussion) |
| 13-Jan-18 | Full wave rectifier+ group discussion |  | File checking+doubts |
| 14-Jan-18 | **Sunday** |
| 3 | 15-Jan-18 |  | Production & detection of circularly polarised light | Introduction of modulus of rigidity |
| 16-Jan-18 |  | Production & detection of elliptically polarised light | Experimental performance of modulus of rigidity |
| 17-Jan-18 |  | Test + assignment  | Introduction of modulus of rigidity |
| 18-Jan-18 | Filters (series inmductor & shunt capacitor) |  | Experimental performance of modulus of rigidity |
| 19-Jan-18 | L- section & R.C filter circuit  |  | Introduction of modulus of rigidity |
| 20-Jan-18 | Test of unit 1st |  | Experimental performance of modulus of rigidity |
| 21-Jan-18 | **Sunday** |
| 4 | 22-Jan-18 | [**Vasant Panchami**](http://www.officeholidays.com/countries/india/vasant_panchami.php) |
| 23-Jan-18 |  | Optical activity & Fresnel theory | Viva voce(gp discussion) |
| 24-Jan-18 | [**Sir Chhotu Ram Jayanti**](http://www.officeholidays.com/countries/india/haryana/2016.php) |
| 25-Jan-18 | Junction transistor & its working |  | Viva voce(gp discussion) |
| 26-Jan-18 | [**Republic Day**](http://www.officeholidays.com/countries/india/india_republic_day.php) |
| 27-Jan-18 | Transistor characterstics in CB configuration  |  | Viva voce(gp discussion) |
| 28-Jan-18 | **Sunday** |
| 5 | 29-Jan-18 |  | Specific rotation + group discussion  | File checking+doubts |
| 30-Jan-18 |  | Polarimeter | Basic introduction of acceleration due to gravity |
| 31-Jan-18 |  | Assignment+green board representation | File checking+doubts |

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| Week | Date | B.Sc II Sem. (Semi conductor devices) | B.Sc IV Sem. (Optics) | B.Sc II Sem. Practical |
|  | 1-Feb-18 | Transistor characterstics in CE configuration  |  | Basic introduction of acceleration due to gravity |
| 2-Feb-18 | Constants of transistor & current relation |  | File checking+doubts |
| 3-Feb-18 | Transistor characterstics in CC configuration  |  | Basic introduction of acceleration due to gravity |
| 4-Feb-18 | **Sunday** |
| 6 | 5-Feb-18 |  | Basic introduction of fourier series  | Experimental performance of acceleration due to gravity |
| 6-Feb-18 |  | Limitation of fourier series,even & odd function | Viva-voce+group discussion |
| 7-Feb-18 |  | Complex form of fourier series & its applications | Experimental performance of acceleration due to gravity |
| 8-Feb-18 | Relation b/w current gains of all three configurations |  | Viva-voce+group discussion |
| 9-Feb-18 | Numerical + group discussion  |  | Experimental performance of acceleration due to gravity |
| 10-Feb-18 | [**Maharshi Dayanand Saraswati Jayanti**](http://www.officeholidays.com/countries/india/haryana/2016.php) |
| 11-Feb-18 | **Sunday** |
| 7 | 12-Feb-18 |  | Solution of triangular & rectangular wave | File checking+doubts |
| 13-Feb-18 | [**Maha Shivratri**](http://www.officeholidays.com/countries/india/maha_shivarati.php) |
| 14-Feb-18 |  | Test | File checking+doubts |
| 15-Feb-18 | Assignment of transistor |  | Test of practicals as done before |
| 16-Feb-18 | Doubts + group discussion  |  | Group discussion+viva-voce |
| 17-Feb-18 | Test of unit 2nd |  | File checking |
| 18-Feb-18 | **Sunday** |
| 8 | 19-Feb-18 |  | Parseval’s identity for fourier series | Introduction of LCR and experimental performance |
| 20-Feb-18 |  | Assignment + test | Viva-voce+(group discussion) |
| 21-Feb-18 |  | Group discussion of functions | Introduction of LCR and experimental performance |
| 22-Feb-18 | Introduction of amplifiers( CB & CE) |  | Viva-voce+(group discussion) |
| 23-Feb-18 | DC load line,selection of operating point & need of biasing |  | Introduction of LCR and experimental performance |
| 24-Feb-18 | Fixed bias & collector to base method |  | Viva-voce+(group discussion) |
| 25-Feb-18 | **Sunday** |
| 9 | 26-Feb-18 |  | Fourier integrals | File checking+doubts |
| 27-Feb-18 |  | Assignment of unit 2nd | Basic introduction of A.C.mains |
| 28-Feb-18 | **Holiday** |

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| Week | Date | B.Sc II Sem. (Semi conductor devices) | B.Sc IV Sem. (Optics) | B.Sc II Sem. Practical |
|  | 1-Mar-18 | [**Guru Ravidas Birthday**](http://www.officeholidays.com/countries/india/guru_ravidas.php) |
| 2-Mar-18 | [**Holi**](http://www.officeholidays.com/countries/india/holi.php) |
| 3-Mar-18 | **Holiday** |
| 4-Mar-18 | **Sunday** |
| 10 | 5-Mar-18 |  | Fourier transform,integrals & its applications | Experimental performance of A.C.mains |
| 6-Mar-18 |  | Solution of differential equation & Gaussian function  | Viva-voce+group discussion |
| 7-Mar-18 |  | Matrix method in paraxial optics | Experimental performance of A.C.mains |
| 8-Mar-18 | Biasing with emitter resistor,voltage divider & classification of amplifier |  | Viva-voce+group discussion |
| 9-Mar-18 | Multistage & RC coupled amplifier |  | Experimental performance of A.C.mains |
| 10-Mar-18 | Feedback of amplifier,negative feedback |  | Viva-voce+group discussion |
| 11-Mar-18 | **Sunday** |
| 11 | 12-Mar-18 |  | Effect of translation & refraction | Doubts+file checking |
| 13-Mar-18 |  | Derivation of thin & thick lens | Basic introduction of A.C.mains using sonometer and performance |
| 14-Mar-18 |  | Unit & nodal planes | Doubts+file checking |
| 15-Mar-18 | Modification of input impedence |  | Basic introduction of A.C.mains using sonometer and performance |
| 16-Mar-18 | Emmiter follower & assignment |  | Doubts+file checking |
| 17-Mar-18 | Test of unit 3rd |  | Basic introduction of A.C.mains using sonometer and performance |
| 18-Mar-18 | **Sunday** |
| 12 | 19-Mar-18 |  | System of thin lens + assignment  | Viva-voce+group discussion |
| 20-Mar-18 |  | Geometrical optics (chromatic & spherical) | Doubts+file checking |
| 21-Mar-18 |  | Coma,astigmatism & distortion abbertion | Viva-voce+group discussion |
| 22-Mar-18 | Introduction of oscillator ,tank circuit  |  | Doubts+file checking |
| 23-Mar-18 | [**Shaheedi Diwas of Bhagat Singh, Rajguru & Sukhdev**](http://www.officeholidays.com/countries/india/haryana/2016.php) |
| 24-Mar-18 | Barkhausen criteria & feedback of LC oscillator  |  | Doubts+file checking |
| 25-Mar-18 | **Sunday/** [**Ram Navami**](http://www.officeholidays.com/countries/india/ram_navami.php) |
| 13 | 26-Mar-18 |  | Optical fibre,critical angle of propagation | Basic introduction of solar cell |
| 27-Mar-18 |  | Mode of propagation,acceptance angle,refractive change | Experimental performance of solar cell |
| 28-Mar-18 |  | Numerical aperture,types of optical fibre | Basic introduction and performance of solar cell |
| 29-Mar-18 | [**Mahavir Jayanti**](http://www.officeholidays.com/countries/india/mahavir_jayanti.php) |
| 30-Mar-18 | Tuned base & collector oscillator |  | Basic introduction of solar cell |
| 31-Mar-18 | Hartley & colpitt’s oscillator |  | Experimental performance of solar cell |

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| Week | Date | B.Sc II Sem. (Semi conductor devices) | B.Sc IV Sem. (Optics) | B.Sc II Sem. Practical |
| 14 | 1-Apr-18 | **Sunday** |
| 2-Apr-18 |  | Pulse dispersion ,attenuation & its application | Viva-voce+group discussion |
| 3-Apr-18 |  | Fibre optics communication | Doubts+file checking |
| 4-Apr-18 |  | Test + assignment | Viva-voce+group discussion |
| 5-Apr-18 | C.R.O & C.R.T  |  | Doubts+file checking |
| 6-Apr-18 | Deflection sensitivity of C.R.T |  | Viva-voce+group discussion |
| 7-Apr-18 | Doubts + group discussion |  | Doubts+file checking |
| 8-Apr-18 | **Sunday** |
| 15 | 9-Apr-18 |  | Revision of unit 1st | Revision of exp-1 |
| 10-Apr-18 |  | Revision of unit 2nd | Revision of exp-2 |
| 11-Apr-18  |  | Revision of unit 3rd | Revision of exp-1 |
| 12-Apr-18 | Revision of unit 1st |  | Revision of exp-2 |
| 13-Apr-18 | Revision of unit 2nd |  | Revision of exp-1 |
| 14-Apr-18 | [**Dr Ambedkar Jayanti**](http://www.officeholidays.com/countries/india/ambedkar_jayanti.php) **/** [**Vaisakhi**](http://www.officeholidays.com/countries/india/haryana/2016.php) |
| 15-Apr-18 | **Sunday** |
| 16 | 16-Apr-18 |  | Revision of unit 4th | Viva-voce |
| 17-Apr-18 |  | Test of unit ist  | Viva-voce |
| 18-Apr-18 | [**Parashurama Jayanti**](http://www.officeholidays.com/countries/india/2016.php) |
| 19-Apr-18 | Revision of unit 3rd |  | Viva-voce |
| 20-Apr-18 | Revision of unit 4th |  | Viva-voce |
| 21-Apr-18 | Test of unit 2nd |  | Viva-voce |
| 22-Apr-18 | **Sunday** |
| 17 | 23-Apr-18 |  | Test of unit 3rd | Group discussion about experiments |
| 24-Apr-18 |  | Test of unit 4th | Group discussion about experiments |
| 25-Apr-18 |  | Group discussion | Group discussion about experiments |
| 26-Apr-18 | Test of unit 1st |  | Group discussion about experiments |
| 27-Apr-18 | Test of unit 2nd |  | Group discussion about experiments |
| 28-Apr-18 | Test of unit 3rd & 4th |  | Group discussion about experiments |