**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Session Even Semester**

**(2017-18)**

**Class: B.Sc.Ist Name of the Teacher: JYOTI**

**Subject: Electricity & Magnetism-II Period : IIIrd**

**Paper : C Room No : 221**

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| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | Jan 08, 2018 | Jan 13, 2018 | | Current and current density, Equation of continuity, Microscopic form of Ohm’s law |
| Week 2 | Jan 15, 2018 | Jan 20, 2018 | | Conductivity ,Failure of ohm’s law,Invariance of charge, E in different frames of reference |
| Week 3 | Jan 22, 2018 | Jan 27, 2018 | | Field of a point charge moving with constant velocity, force between parallel currents. |
| Week 4 | Jan 29, 2018 | Feb 3, 2018 | | Behaviour of various substances in magnetic field, |
| Week 5 | Feb 5, 2018 | Feb 10, 2018 | | Definition of M and H and their relation to free and bound currents.Permeability and susceptibility and their interrelationship. |
| Week 6 | Feb 12, 2018 | Feb 17, 2018 | | B-H curve and energy loss in hysterisis. |
| Week 7 | Feb 19, 2018 | Feb 24, 2018 | | Langevin theory of diamagnetism |
| Week 8 | Feb 26, 2018 | Mar 03 , 2018 | | Lorentz’s force, Definition of B, Biot savart’s law. |
| **2nd week March (Mid Semester Exam)** | | | | |
| Week 9 | March 15, 2018 | | March 17, 2018 | Application of Biot Savart’s law to long straight wire,circular current loop and solenoid. |
| Week 10 | March 19 , 2018 | | March 24, 2018 | Ampere’s circuital law and its application |
| Week 11 | March 26, 2018 | | March 31, 2018 | Divergence & curl of B |
| Week 12 | April 02, 2018 | | April 07, 2018 | Hall effect, expression & coefficient. |
| Week 13 | April 09, 2018 | | April 14 , 2018 | Vector potential, Definition and derivation |
| Week 14 | April 16, 2018 | | April 21, 2018 | current density-definition,its use in calculation of change in magnetic field at a current sheet Energy stored in magnetric field, |
| Week 15 | April 23, 2018 | | April 28, 2018 | Faraday’s law of EM induction, Displacement current, Mutual inductance |
| Week 16 | April 30, 2018 | | May 05, 2018 | Reciprocity theorem ,Self inductance for solenoid. |