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

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class: B.SC V sem and B.SC II sem Name of the Teacher: Dr. Harjeet Kaur**

**Subject: Physics Period : First and Third**

**Paper : C and B Room No : 126 (3-6) and 315 (1-2)**

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| **S. No** | **Dates** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | Bohrs formula, Range//Wave motion and its characteristics |
| Week 2 | 21/01/2019 –  25/01/2019 | Interaction of light charged particle, Bremsstrahlung, Multiple Coulomb Scattering, Straggling// Wave equation |
| Week 3 | 28/01/2019 –  2/02/2019 | Interaction of gamma rays, Absorption of gamma rays, Pair Production// Solution of wave equation, Energy of progressive wave |
| Week 4 | 4/02/2019 –  9/02/2019 | Gas filled detectors, ionization chamber, proportional counter, GM counter //Velocity and characteristic impedance |
| Week 5 | 11/02/2019 –  16/02/2019 | GM counter ctd., Scintillation counter, Semi conductor detectors//Reflection and transmission coefficients |
| Week 6 | 18/02/2019 –  23/02/2019 | Cerenkov counter, Cockroft accelerator, Van de graff accel.// Matching of impedance, Standing wave, Wave velocity and group velocity |
| Week 7 | 25/02/2019 –  02/03/2019 | Tandem accel., Linear accel., Betatron// Maxwells equations, em wave with conductivity zero |
| Mid Semester Exam | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Cyclotron, Synchrotrons//Refractive index, Transverse nature of em wave |
| Week 9 | 18 /03/2019 –  22/03/2019 | Origin and composition of cosmic rays, Properties of cosmic rays//Poyntic vector and theorm, |
| Week 10 | 25/03/2019 –  30/03/2019 | Elementary particles, Classification//Em wave for conducting medium, Skin depth |
| Week 11 | 1/04/2019 –  6/04/2019 | Fundamental Interactions, Charge conjugation, Quantum numbers//skin depth |
| Week 12 | 8/04/2019 –  12/04/2019 | Quantum numbers ctd., Conservation laws// Dispersion, Impedance of conducting medium |
| Week 13 | 15/04/2019 –  20/04/2019 | Quark theory// Reflection and transmission of em waves at boundary |
| Week 14 | 22/04/2019 –  27/04/2019 | Numericals//Ionoshere |
| Week 15 | 29 /04/2019 –  3/05/2019 | Numerical//Relation between electric and magnetic field vector |