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

**Teaching Plan Session Even Semester**

**(2017-18)**

**Class: B.Sc 5th sem and B.Sc 1st sem Name of the Teacher: Dr. Harjeet Kaur**

**Subject: : Physics Period :Third Period**

**Paper : C and B Room No : 33 (1-4) and 29 (5-6)**

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| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | Jan 08, 2018 | Jan 13, 2018 | | Bohrs formula, Range, Wave motion and its characteristics |
| Week 2 | Jan 15, 2018 | Jan 20, 2018 | | Interaction of light charged particle, Bremsstrahlung, Multiple Coulomb Scattering, Straggling, Wave equation |
| Week 3 | Jan 22, 2018 | Jan 27, 2018 | | Interaction of gamma rays, Absorption of gamma rays, Pair Production, Solution of wave equation, Energy of progressive wave |
| Week 4 | Jan 29, 2018 | Feb 3, 2018 | | Gas filled detectors, ionization chamber, proportional counter, GM counterVelocity and characteristic impedance |
| Week 5 | Feb 5, 2018 | Feb 10, 2018 | | GM counter ctd., Scintillation counter, Semi conductor detectors, Reflection and transmission coefficients |
| Week 6 | Feb 12, 2018 | Feb 17, 2018 | | Cerenkov counter, Cockroft accelerator, Van de graff accel., Matching of impedance, Standing wave, Wave velocity and group velocity |
| Week 7 | Feb 19, 2018 | Feb 24, 2018 | | Tandem accel., Linear accel., Betatron, Maxwells equations, em wave with conductivity zero |
| Week 8 | Feb 26, 2018 | Mar 03 , 2018 | | Cyclotron, Synchrotrons.Refractive index, Transverse nature of em wave |
| **2nd week March (Mid Semester Exam)** | | | | |
| Week 9 | March 15, 2018 | | March 17, 2018 | Origin and composition of cosmic rays, Properties of cosmic rays, Poyntic vector and theorm, |
| Week 10 | March 19 , 2018 | | March 24, 2018 | Elementary particles, Classification, Em wave for conducting medium, Skin depth |
| Week 11 | March 26, 2018 | | March 31, 2018 | Fundamental Interactions, Charge conjugation, Quantum numbers |
| Week 12 | April 02, 2018 | | April 07, 2018 | Quantum numbers ctd., Conservation laws, Dispersion, Impedance of conducting medium |
| Week 13 | April 09, 2018 | | April 14 , 2018 | Quark theory, Reflection and transmission of em waves at boundary |
| Week 14 | April 16, 2018 | | April 21, 2018 | Revision, test, Ionoshere |
| Week 15 | April 23, 2018 | | April 28, 2018 | Revision, test, Relation between electric and magnetic field vector |
| Week 16 | April 30, 2018 | | May 05, 2018 | Revision, tests |