**Post Graduate Govt. College for Girls, Sector-42, Chandigarh**

**Teaching Plan (Even Semester) Session (2019-2020)**

**Class: Bsc III/Bsc III (Hns)**   **Name of the Teacher: Dr. Harjeet Kaur**

**Subject: Physics Period: 6 (1-2) 2(5-6) /4(3-4)**

**Paper: C Room No:218,129/114**

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| **S. No** | **Dates** | **Topics to be Covered** |
| Week 1 | 09-01-2020 to 11-01-2020 | Bohrs formula// Alpha decay, Xray, Auger Electron |
| Week 2 | 13-01-2020 to 18-01-2020 | Bohrs formula, Range , Interaction of light charged particle, Bremsstrahlung // Beta Decay, Neutrino, radiation Sources |
| Week 3 | 20-01-2020 to 25-01-2020 | Multiple Coulomb Scattering, Straggling , Interaction of gamma rays, Absorption of gamma rays, Pair Production// Natural Radioactvity Details |
| Week 4 | 27-01-2020 to 01-02-2020 | Gas filled detectors, ionization chamber // Bohrs formula, Range , Interaction of light charged particle, Bremsstrahlung |
| Week 5 | 03-02-2020 to 08-02-2020 | proportional counter, GM counter, // Multiple Coulomb Scattering, Straggling , Interaction of gamma rays, Absorption of gamma rays, Pair Production |
| Week 6 | 10-02-2020 to 15-02-2020 | GM counter ctd., Scintillation counter, Semi conductor detectors.// Gas filled detectors, ionization chamber |
| Week 7 | 17-02-2020 to 22-02-2020 | Cerenkov counter, Cockroft accelerator, Van de graff generator // proportional counter, GM counter |
| Week 8 | 24-02-2020 to 29-02-2020 | Tandem accel., Linear accelerator// Scintillation counter, Semi conductor detectors, Betatron, Cyclotron |
| Week 9 | 02-03-2020 to 05-03-2020 | Betatron, Cyclotron//Cosmic rays, properties of Detectors |
| Mid Semester Exams (06-03-2020 to 13-03-2020) | | |
| Week 11 | 14-03-2020, 16-03-2020 to 21-03-2020 | Synchrotrons//Detection of slow and fast neutrons |
| Week 12 | 24-03-2020 to 28-03-2020 | Origin and composition of cosmic rays, Properties of cosmic rays//fano factor, Diffusion |
| Week 13 | 30-03-2020 to 04-04-2020 | Elementary particles, Classification// Air borne radioactivity |
| Week 14 | 07-04-2020 to 11-04-2020 | Fundamental Interactions, Charge conjugation, Quantum numbers//Interaction of neutrons |
| Week 15 | 15-04-2020 to 18-04-2020 | Quantum numbers ctd., Conservation laws//Radioisotope Sources, Fission |
| Week 16 | 20-04-2020 to 24-04-2020 | Quark theory// Photoneutron Sources |
| Week 17 | 27-04-2020 to 02-05-2020 | Numericals//Revision |
| Week 18 | 04-05-2020 | Numerical//Revision |