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

**Teaching Plan Session Odd Semester**

**(2017-18)**

**Class: MBT-III SEM**

**Name of the Teacher: Mrs Sonia Chauhan**

**Subject: Bioinstruments & their applications**

**Period: 4lec/week**

**Paper:** - **Bioinstruments & their applications** **Room No : 221**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | July 22 & July 24 2017 | July 29, 2017 | | Microscopy: LM,FM, phase contrast microscope,AAS |
| Week 2 | July 31 2017 | Aug 5, 2017 | | Microscopy:AFM, SCM,TEM & SEM, Tunnel microscope |
| Week 3 | Aug 7, 2017 | Aug 12, 2017 | | Spectrophotometer: UV and Vis |
| Week 4 | Aug 14, 2017 | Aug 19, 2017 | | Mass Spectroscopy |
| Week 5 | Aug 21, 2017 | Aug 26, 2017 | | Mass Spectroscopy |
| Week 6 | Aug 28, 2017 | Sept 2, 2017 | | IR and Raman spectroscopy |
| Week 7 | Sept 4, 2017 | Sept 9, 2017 | | CD spectroscopy, NMR, ESR |
| Week 8 | Sept 11, 2017 | Sept 16, 2017 | | Centrifugation: Theory and its applications |
| Week 9 | Sept 18, 2017 | Sept 23, 2017 | | Electrophoresis: Theory, different methods of electrophoresis |
| Week 10 | Sept 25, 2017 | Sept 29, 2017 | | Chromatography: GC, Paper Ch., TLC,HPLC |
| **Autumn Break (30 Sept 2017- 09 Oct 2017)**  **Mid Semester Exam (10 Oct 2017 – 17 Oct 2017)** | | | | |  |  | FPLC,GCMS,LCMS |
| Week 11 | Oct 18, 2017 | | Oct 21, 2017 | FPLC,GCMS,LCMS |
| Week 12 | Oct 23, 2017 | | Oct 28, 2017 | Crystallography |
| Week 13 | Oct 30, 2017 | | Nov 4, 2017 | X-ray Diffraction, Electron diffraction, neutron diffraction |
| Week 14 | Nov 6, 2017 | | Nov 11, 2017 | MALDI-TOF |
| Week 15 | Nov 13, 2017 | | Nov 18, 2017 | Radioisotope techniques: |
| Week 16 | Nov 20, 2017 | | Nov 25, 2017 | Protein purification workstation |
| Week 17 | Nov 27, 2017 | | Dec 1, 2017 | Revision exercises |