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

**Teaching Plan Session Odd Semester**

**(2017-18)**

**Class: MBT-I SEM**

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

**Subject: Bioprocess Engineering**

**Period: 2lec/week**

**Paper:** - **Bioprocess Engineering Room No : 127**

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| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | July 22 & July 24 2017 | July 29, 2017 | | Unit-III: Introduction: USP; media composition |
| Week 2 | July 31 2017 | Aug 5, 2017 | | Inoculum development |
| Week 3 | Aug 7, 2017 | Aug 12, 2017 | | Sterilization |
| Week 4 | Aug 14, 2017 | Aug 19, 2017 | | Sterilization contd. |
| Week 5 | Aug 21, 2017 | Aug 26, 2017 | | Sterilization contd. |
| Week 6 | Aug 28, 2017 | Sept 2, 2017 | | DSP: cell disruptions, Flocculation |
| Week 7 | Sept 4, 2017 | Sept 9, 2017 | | filtration, ultrafiltration |
| Week 8 | Sept 11, 2017 | Sept 16, 2017 | | Centrifugation, ultracentrifugation |
| Week 9 | Sept 18, 2017 | Sept 23, 2017 | | Chromatographic methods |
| Week 10 | Sept 25, 2017 | Sept 29, 2017 | | Two phase aqueous separations, solvent-solvent extractions; Pre-treatment, crystallization etc. |
| **Autumn Break (30 Sept 2017- 09 Oct 2017)**  **Mid Semester Exam (10 Oct 2017 – 17 Oct 2017)** | | | | |
| Week 11 | Oct 18, 2017 | | Oct 21, 2017 | UNIT-II: Mass transfer in bioreactors: Aeration and Agitation in Bioreactors |
| Week 12 | Oct 23, 2017 | | Oct 28, 2017 | ….do…contd. |
| Week 13 | Oct 30, 2017 | | Nov 4, 2017 | ….do…contd. |
| Week 14 | Nov 6, 2017 | | Nov 11, 2017 | heat transfer in bioreactors |
| Week 15 | Nov 13, 2017 | | Nov 18, 2017 | Concept of mass transfer correlation and scale up. |
| Week 16 | Nov 20, 2017 | | Nov 25, 2017 | Revision exercises |
| Week 17 | Nov 27, 2017 | | Dec 1, 2017 | Revision exercises |

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

**Teaching Plan Session Even Semester**

**(2017-18)**

**Class: MBT- II Semester**

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

**Subject: IPR, Bioethics and Entrepreneurship**

**Period: II period(2); V period(1,5,6)**

**Paper: IPR, Bioethics and Entrepreneurship Room No : 127**

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| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | Jan 08, 2018 | Jan 13, 2018 | | Introduction to IPR |
| Week 2 | Jan 15, 2018 | Jan 20, 2018 | | Ownership of Tangible and Intellectual Property. Basic requirements of patentability, patentable subject matter, novelty and the Public Domain; Non-obviousness, |
| Week 3 | Jan 22, 2018 | Jan 27, 2018 | | Patent Claims, the legal decision-making process |
| Week 4 | Jan 29, 2018 | Feb 3, 2018 | | Foreign Patents |
| Week 5 | Feb 5, 2018 | Feb 10, 2018 | | Biotechnology and hunger: Challenges for the Indian Biotechnological research  and industries. Social and ethical implication of biological weapons |
| Week 6 | Feb 12, 2018 | Feb 17, 2018 | | Unit - II Patent Litigation: Substantive and Procedural Aspects |
| Week 7 | Feb 19, 2018 | Feb 24, 2018 | | ..do…contd |
| Week 8 | Feb 26, 2018 | Mar 03 , 2018 | | Special issues in Biotechnology Patents: Disclosure Requirements, Ethical issues, Case studies/ experiences from developing and developed countries, IPR issues in the Indian context. |
| **2nd week March (Mid Semester Exam)** | | | | |
| Week 9 | March 12, 2018 | | March 17, 2018 | Copyright |
| Week 10 | March 19 , 2018 | | March 24, 2018 | Copyright contd. |
| Week 11 | March 26, 2018 | | March 31, 2018 | IT Act, 2000; Aims and Objectives; Overview of the Act; Jurisdiction |
| Week 12 | April 02, 2018 | | April 07, 2018 | Role of Certifying  Authority; Regulators under IT Act; Cyber Crime-offences and Contraventions; Grey  Areas on IT Act. |
| Week 13 | April 09, 2018 | | April 14 , 2018 | International Treaties and Conventions; Business Software Patents; Plant Biotechnology- UPOV and plant breeder’s rights |
| Week 14 | April 16, 2018 | | April 21, 2018 | The Cartagena protocol on biosafety; Entrepreneurship: Need, scope, philosophy and classification. Creativity and  Entrepreneurship. Entrepreneurship competencies and traits, factors affecting  Entrepreneurship development |
| Week 15 | April 23, 2018 | | April 28, 2018 | Functions of entrepreneurship, Entrepreneurship with the motive of economic growth,  theory of social change, family structure, migration and enterprise. |
| Week 16 | April 30, 2018 | | May 05, 2018 | Barriers to entrepreneurship, community and entrepreneurship. |