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

**Teaching Plan (odd Sem) session 2019-20.**

**Class: B.Sc. I sem Microbiology (E) Teacher: Akashdeep Sandhu**

**Subject: Microbiology Period: 6th**

**Paper: MIC 101 & 102 Room No: 219**

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| **S.No.** | **Dates** | **Topics to be covered** |
| **Week 1** | **23/7/19 to 27/7/19** | History Development scope and application of Microbiology |
| **Week 2** | **29/7/19 to 03/8/19** | Methods of microbiology isolation of pure culture. Theory and practice of sterilization. |
| **Week 3** | **05/8/19 to 10/8/19** | Microbial Nutrition: Requirements for growth. Chemical requirement. |
| **Week 4** | **13/8/19 to 17/8/19** | Physical requirements. |
| **Week 5** | **19/8/19 to 24/8/19** | Cultured media. Cultivation of aerobes and anaerobes. |
| **Week 6** | **26/8/19 to 31/8/19** | Enymes: chemical and physical properties. Classification and nomenclature of enzymes. |
| **Week 7** | **02/9/19 to 07/9/19** | Factors affecting enzyme activity. |
| **Week 8** | **09/9/19 to 14/9/19** | Respiration and fermentation. Glycolysis. |
| **Week 9** | **16/9/19 to 21/9/19** | Pentose phosphate pathway. |
| **Week 10** | **23/9/19 to 28/7/19**  **Youth fest 24/9/19 to 27/9/19** | ED pathway |
| **Week 11** | **30/9/19 to 05/10/19** | TCA cycle. Glyoxylate Pathway |
| **Mid Semester Exams** | | |
| **Week 12** | **16/10/19 to 19/10/19** | Conjugation. Transformation |
| **Week 13** | **21/10/19 to 26/10/19** | Transduction. |
| **Week 14** | **29/10/19 to 02/11/19** | Regulation of gene expression. |
| **Week 15** | **04/11/19 to 09/11/19** | rDNA technology, genetic engineering and gene cloning in microorganisms. |
| **Week 16** | **11/11/19 to 16/11/19** | Strategies of genetic engineering. Restriction enzymes. |
| **Week 17** | **18/11/19 to 23/11/19** | Vectors. |
| **Week 18** | **25/11/19 to 30/11/19** | Revision. |