**DEPARTMENT OF BOTANY**

**Teaching Plan 2020-21**

**(Even Semester)**

**Dr. Divya Verma**

**B.Sc. (H) Botany 3rd Year, Sem VI**

**Discipline Specific Elective- Bioinformatics**

| **Name of Paper & Code** | **Allocation of Lectures** | **Month wise schedule** | **Reading suggestions** |
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| * **Unit 1. Introduction to Bioinformatics** * **Unit 2. Databases in Bioinformatics** | 8 lectures | 1st– 15th Jan | * Ghosh. and Bibekanand *Bioinformatics: Principles and Applications*. * Pevsner J. (2009) *Bioinformatics and Functional Genomics*. |
| * **Unit 3. Biological Sequence Databases** | 9 lectures | 16th– 31st Jan |
| * **Unit 3. Biological Sequence Databases** | 8 lectures | 1st– 15th Feb |
| * **Unit 3. Biological Sequence Databases** * **Unit 4. Sequence Alignments** | 8 lectures | 16th– 28th Feb |
| * **Unit 4. Sequence Alignments** | 4 lectures | 1st– 15th Mar |
| * **Unit 5. Molecular Phylogeny** | 8 lectures | 16th– 31st Mar |
| * **Unit 5. Molecular Phylogeny** | 8 lectures | 1st– 15th Apr |
| * **Unit 6. Applications of Bioinformatics** | 8 lectures | 16th– 27th Apr |

**B.Sc. (H) Botany 3rd Year, Sem VI**

**Discipline Specific Elective- Bioinformatics (PRACTICALS)**

| **Name of Paper & Code** | **Allocation of Lectures** | **Month wise schedule** | **Reading suggestions** |
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| * Nucleic acid and protein databases. * Sequence retrieval from databases. | 4 Practicals | 1st Jan – 31st Jan | * Ghosh. and Bibekanand * Pevsner |
| * Sequence alignment * Sequence homology and Gene annotation. | 4 Practicals | 1st Feb – 29th Feb |
| * Construction of phylogenetic tree. | 2 Practicals | 1st Mar – 31st Mar |
| * Test, Revision and Mock | 4 Practicals | 1st Apr – 28th Apr |