**Notes details**

1. Cloning vectors: Refer from B.Sc. or from Paper 1 section
2. Concept of maps, physical maps:
3. <https://www.ncbi.nlm.nih.gov/books/NBK21116/>
4. <https://bio.libretexts.org/Bookshelves/Introductory_and_General_Biology/Book%3A_General_Biology_(Boundless)/17%3A_Biotechnology_and_Genomics/17.02%3A_Mapping_Genomes/17.2B%3A_Physical_Maps_and_Integration_with_Genetic_Maps>
5. Shotgun libraries:
6. DNA polymorphism:
7. Nucleotides: In general you can write for DNA And its full description
8. DNA sequences: GenBank, EMBL,DDBJ – mention about that

3.6 Bioinformatics & Computational Biology

a. Data analysis methods for omics data

b. Database resources for genomics, proteomics, and other omics data

c. Statistical analysis and data mining (Application / case study)

d. Machine learning and predictive modeling (Case study)

**Material for above section to be prepared by individual student as per their understanding and prepare and based on practical application.**

**Discussion will be done.**

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