



Biotechnology Department

Intensive Training Programme on, “Application of Bioinformatics in Biotechnology”.

Following enlisted molecular techniques are required for students throughout their research carrier. These techniques are the base to enter any research institute or any agricultural research organization.

Duration of Training Programme: **Start Date: 08 Feb. 2022**

End Date: 16 Feb. 2022

Day	Session	Module	Outcome
Day-1	Morning (10 am to 01 pm)	Introduction to Basic Bioinformatics	Students will be familiar with in-vivo: in-vitro: in-silico techniques
	Afternoon (02 pm to 05 pm)	Basics of Internet used in Bioinformatics	
Day-2	Morning (10 am to 01 pm)	Databases and their Applications	Students will learn Bioinformatics Approach with Central Dogma of Biology
	Afternoon (02 pm to 05 pm)	Exploring Entrez – NCBI	
Day-3	Morning (10 am to 01 pm)	PDB and Swiss Model	Students will learn Different Biological Databases
	Afternoon (02 pm to 05 pm)	BRINDA and KEGG	
Day-4	Morning (10 am to 01 pm)	Literature Mining	Students will be able to Retrieve & Analyze Literature & Nucleotide-Protein Sequences
	Afternoon (02 pm to 05 pm)	Comparative Genomics and HGP	

Day-5	Morning (10 am to 01 pm)	Structural Bioinformatics: (2D – 3D)	Students will explore the Structure of different Compounds and Will understand Prediction of 2D Structure of Proteins
	Afternoon (02 pm to 05 pm)	Ramachandran Plot (Theory and Practical)	
Day-6	Morning (10 am to 01 pm)	Receptor-Ligand Preparation	Students will understand Concept of Drug Designing & M. Docking.
	Afternoon (02 pm to 05 pm)	Molecular Docking	
Day-7	Morning (10 am to 01 pm)	Evolutionary study of Livings Organisms	Students will be able to construct Phylogenetic tee of living organisms
	Afternoon (02 pm to 05 pm)	Exit Exam	

Name of the training instructor:

Ms. Shabana H. Shaikh

Link for Registration: <https://forms.gle/yjU7Sm498V5bskoV9>

Contact for further details: 7507420938

HoD

Principal