# Department of Biotechnology: Unleashing the Power of Life Sciences

Our B.Sc. Biotechnology program is your gateway to a dynamic and rapidly evolving field. Dive into the intricate world of cells, explore the potential of genetic engineering, and master the tools for bioremediation and innovation.

## **Program Objectives:**

- Equip you with a solid foundation in core biosciences like Immunology, biochemistry, molecular biology, and microbiology.
- Develop practical expertise in key biotechnological techniques like microbiology, biochemistry, recombinant DNA technology, and bioprocess engineering.
- Cultivate ethical and responsible scientific conduct with awareness of the social and environmental implications of biotechnology.
- Prepare you for diverse career paths in research, development, academia, healthcare, pharmaceuticals, agriculture, and environmental sustainability.

### **Course Outcomes:**

Year 1:

- Biotechnology Principles: Delve into recombinant DNA technology, gene manipulation, and protein engineering.
- Molecules of Life: Master the fundamentals of biochemistry and biomolecules.
- Microbial World: Explore the diverse universe of microorganisms and their applications.

#### Year 2:

- Genetics and Evolution: Decode the secrets of DNA, inheritance, and genetic engineering.
- Bioinformatics Tools: Analyze biological data using computational methods and sequencing technologies.

#### Year 3:

- Plant and Animal Biotechnology: Understand the applications of biotechnology in agriculture and animal sciences.
- Bioprocess Engineering: Design and optimize bioprocesses for production of valuable bio products.
- Research Project: Immerse yourself in a focused research project under the guidance of faculty, gaining hands-on experience in scientific inquiry and problem-solving.

## **Teaching Faculty:**

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2.	Name: Dr. Virender Kumar Designation: Assistant Professor (Extension) Qualification: M.Sc., NET, Ph.D. E-mail: <u>The.Dr.Viren@gmail.com</u> , <u>virenbt@gmail.com</u> Mobile No: 9588189543	