## **Academy of Technology**



**Department : EE** 

**Paper Name: Biology for Engineers** 

Semester: 3rd

Paper Code: BS-EE301

Power Point Presentation on Why Should We Study Biology?

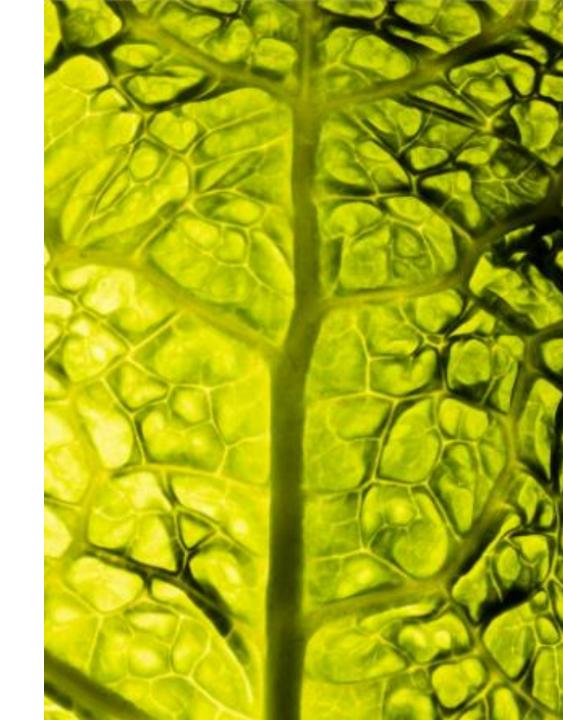
Presented by

Name of the Student: Anushree Oraon

**University Roll No.:16901622011** 

#### INTRODUCTION

Biology, the scientific study of life, stands as one of the most captivating and essential disciplines in the realm of science. Its exploration has allowed humanity to comprehend the intricate web of life that surrounds us, offering invaluable insights into the origin, function, and complexity of living organisms. The study of biology plays a crucial role in addressing some of the most pressing challenges facing humanity today. It a necessity for the progress and preservation of life on Earth.



## **Understanding the Human Body**

- Knowledge of Body Structure and Function: It provides insights into its complex structure at various levels, from the microscopic cellular level to the macroscopic organ level. For example: Cellular Biology, Anatomy, Physiology etc.
- Awareness of Organs and Systems: A deeper comprehension of the human body helps in recognizing the significance of individual organs and how they collaborate to maintain overall health. For example: Cardiovascular system, Respiratory system Digestive System, Nervous System, Musculoskeletal System, Endocrine System etc.



### Improving food and comforts

- Knowledge about Beneficial Plants and Animals: By understanding plant biology, we can identify species that are beneficial for human needs, such as food production, medicine, and ecological balance which helps in selecting the right crops and livestock for cultivation and breeding, ensuring maximum yield and efficiency.
- Enhanced Food Production and Quality
  :Techniques like genetic engineering, crop
  rotation, and pest control are based on
  biological knowledge, allowing us to develop
  disease-resistant and high-yielding crop
  varieties

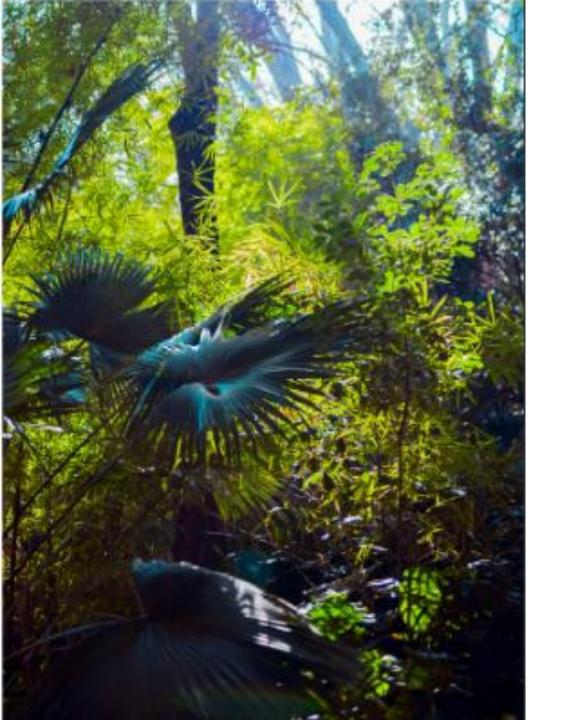




## **Advancements in Medicine and Disease Control**

Manufacturing Medicines for Various
 <u>Diseases</u>: Biology has helped us to discover and manufacture medicine for treating various diseases.

 Advancements in Healthcare: Biology has helped in discovering causes and methods of eradication of disease causing germs.
 Thus an advancement in health care has occurred leading to an increase in life expectancy.



# **Environmental Awareness and Biodiversity**

• Conservation and Environmental Equilibrium :Biology teaches us to conserve natural resources, forests, wild animals, etc. for maintaining environmental equilibrium.

• <u>Understanding Ecosystems</u>: Biology has helped us to understand intricate relationship that exists among organisms in an ecosystem as well as the importance of biodiversity.

### **CONCLUSION**

The importance of studying biology lies in its ability to provide a profound understanding of the natural world, including the human body, ecosystems, and the intricate relationships between organisms. This knowledge empowers us to make informed decisions, improve food production, advance medical research, and protect the environment. Moving forward, it is crucial to emphasize the significance of studying biology and promote awareness about its implications in various aspects of life. We must take responsible actions to conserve biodiversity, protect our environment, and adopt sustainable practices to ensure a better future for generations to come. Let us actively engage in the study of biology and work collectively to create a healthier and more sustainable world.

#### REFERENCE

- 1) "Biology for Engineers: As per latest AICTE Curriculum", Wiley Editorial, John Wiley & Sons, 2018.
- 2) N. A. Campbell, J. B. Reece, L. Urry, M. L. Cain & S. A. Wasserman, "Biology: A global approach", Pearson Education Ltd, 2014.

## THANK YOU