



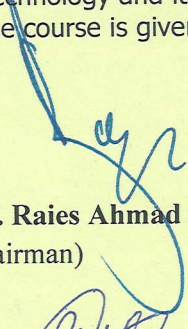
UNIVERSITY OF KASHMIR

Department of Bio-Technology

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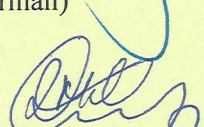
Board of Undergraduate Studies in Biotechnology-Minutes thereof

A meeting of Board of Undergraduate Studies in Biotechnology was held on **18th May 2022** at **11:30 am** in the department of Biotechnology. At the outset, Head of Department welcomed all the members and placed the agenda before the committee. The agenda of the meeting was to formulate the Undergraduate syllabus for Biotechnology course strictly in accordance with NEP-2020. After thorough discussion a three credit course with three units covering basics of Biotechnology and its application in agriculture, human health and environment was approved. Copy of the course is given in Annexure –I.


Prof. Raies Ahmad Qadri
(Chairman)


Prof. Khalid Majid Fazili


Prof. Shajrul Amin


Dr. Mahboobul Hussain


Dr. Ajaz H. Wani

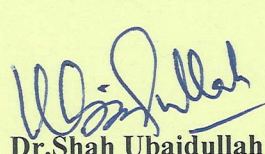

Mr. Bilal Ahmad Reshi


Mrs. Sameena Ismail


Dr. Roohi Mushtaq


Dr. Muzafer Ahmad Ahanger


Dr. Mohd Ashraf Khan


Dr. Shah Ubaidullah

Dr. Arif Jan
(Nominee of Chairperson, JKBOSE)


Dr. Niyaz Ahmad Naikoo


Head of Department, Biotechnology

Annexure - I

Introduction to Bio-Technology

Credits: 3

Objective: This course is aimed to introduce students to basic concepts of Biotechnology and its relevance in contemporary times.

Hours: 15

UNIT I:

Definition, Scope and Milestones in Biotechnology.
Overview of Structure and Functions of Biomolecules – Carbohydrates, Proteins, Lipids and Nucleic acids.

Hours: 15

UNIT II:

Central Dogma (Flow of information in a Cell) – Replication, Transcription and Translation.
Introduction to Recombinant DNA Technology.
Human Genome Project – Goals and Applications.

Hours: 15

UNIT III:

Applications of Biotechnology in Agriculture (Golden rice and Bt Cotton); Human Health (Antibiotics, Vaccines, Insulin and DNA finger printing); Environment (Bioremediation and Biofuels)

Expected Learning Outcomes:

1. Understanding of Biotechnology as a discipline.
2. Understanding the flow of information in a cell and basics of recombinant DNA technology.
3. Understanding the applications of Biotechnology.

Books recommended:

1. Lehninger Principles of Biochemistry, Nelson and Cox, WH Freeman.
2. Introduction to Biotechnology, William Thieman and Michael Palladino Benjamin Cummings Publishing Company.
3. Biotechnology, Satyanarayana, Books & Allied Ltd.
4. Molecular Biotechnology: Principles and Applications of Recombinant DNA, Bernard R. Glick, Cheryl L. Patten, ASM Press.
5. Biotechnology Fundamentals and Applications, S.S Purohit, Agrobios

Imdad
Khaleel Majid Farid

Dr. Nujari

Shajid
SHAJEUL AIN

Dr. Mohd Ishraf 18/05/22

Dr. Roohi Mushtaq
18/05/22

Dr. Shah Ubaiddullah