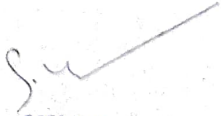


## B.Sc-I Entire Biotechnology NEP COS 2023-2024

Subject Offered Semester-I	Course Outcome
<b>DSC07BTE11- Biotechnology-I Biotechnology for Human welfare - I</b>	At the end of this course students will be able to: CO 1. To enumerate the importance of Biotechnology in Human Development. CO 2. To learn the different aspect of Biotechnology. CO 3. Understand the importance of Biotechnology in health. CO4.To learn the techniques of production of Biofertilizer.
<b>DSC07BTE12- Biotechnology-II Biochemistry-I</b>	At the end of this course students will be able to: CO 1. Understand basic concepts of origin of life CO 2. Outline the importance of carbohydrates and lipids in the diet. CO 3.understand the basic concepts of biological buffer system. CO 4. Predict and illustrate sap value, iodine value, and acid value.
<b>MIN07BTE11-Microbiology- I- Introduction to Microbial World.</b>	At the end of this course students will be able to: CO 1. Understand Historical background fr development of Microbiology CO 2 understand classification of Microorganisms CO 3. Understand the bacterial bacterial taxonomy CO 4. Distinguish Beneficial and Harmful Microorganisms.
<b>MIN07BTE12-Microbiology- II- Techniques in Microbiology.</b>	At the end of the course students will be able to : CO 1. Acquire the Knowledge about the different sterilization techniques. CO 2. Perform different staining procedures. CO 3 distinguish different types of Microscopes. CO 4. Understand different concept of sterilization.
<b>OEC07BTE11- Bio- Instrumentation</b>	At the end of this course students will be able to: CO 1. Illustrate different methods of protein purification CO 2. Demonstrate and use different lab instruments CO 3 understand basic concepts of spectroscopy CO 4. Perceive the knowledge about different types of microscopy.
Subjects offered Semester-II	Course Outcomes
<b>DSC07BTE21-Biotechnology- III-Biotechnology for Human welfare- II</b>	At the end of this course students will be able to: CO 1. Acquire the knowledge about importance of biotechnology. CO 2. Acquire the knowledge about applications of



	<p>biotechnology in commercial products.</p> <p>CO 3. Understand the importance of Biotechnology in plant and animal cell cultivation.</p> <p>CO 4. Acquire the knowledge about applications of biotechnology in conservation and environment.</p>
<b>DSC07BTE22-Biotechnology - IV Biochemistry-II</b>	<p>At the end of this course students will be able to:</p> <p>CO 1 Classify different types of proteins.</p> <p>CO 2. Elaborate the role of chromatography in purification of biomolecule.</p> <p>CO 3. Describe the functions of different coenzymes.</p> <p>CO4. Explain IUB classification of enzymes.</p>
<b>MIN07BTE21-Microbiology-III- Bacterial Cytology &amp; Cultivation.</b>	<p>At the end of this course students will be able to:</p> <p>CO 1. Illustrate the morphology of Bacterial cell</p> <p>CO 2. Classify the Microorganisms on the basis of Nutrition</p> <p>CO 3. Study the different pure culture techniques.</p> <p>CO4. Study different phases of Microbial Growth.</p>
<b>MIN07BTE22-Microbiology-IV-Virology</b>	<p>At the end of this course students will be able to:</p> <p>CO.1. Elucidate different structure of viruses.</p> <p>CO.2. Demonstrate experimental procedure for cultivation of viruses.</p> <p>CO. 3. Compare the replication of viruses.</p> <p>CO.4. Understanding the infection cycle of viruses.</p>
<b>OEC07BTE21-Ecology</b>	<p>At the end of this course students will be able to:</p> <p>CO1:- Appreciate the ethical, cross-cultural and historical context of environment with respect to classical ecology.</p> <p>CO2:- Construct the relationship between different biogeochemical cycles.</p> <p>CO3:- Outline the importance of Population ecology.</p> <p>CO4:- Reflect the importance of Evolution theories in ecology.</p>
<b>OEC07BTE22-Animal Science</b>	<p>At the end of this course students will be able to:</p> <p>CO 1. Understanding the diversity of life.</p> <p>CO 2. Reflect the importance of host parasite relationship</p> <p>CO 3. Explain the structure and functions of different types of tissue.</p> <p>CO4. Encourage the students to opt for carrier in applied zoology.</p>
<b>SEC07BTE21-Basics in Cell biology</b>	<p>At the end of this course students will be able to:</p> <p>CO 1.Percieve knowledge about the cell theory</p> <p>CO 2. Explain concept of types of membrane transport.</p> <p>CO 3.Understanding functions of different cell organelles</p> <p>CO. 4. Understanding of cytoskeleton elements.</p>

  
**HEAD**  
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)  
VIVEKANAND COLLEGE, KOLHAPUR  
(EMPOWERED AUTONOMOUS)