

Industrial Biotechnology Training
Environmental Biotechnology (Standard)
Session 2021 - 2022

Module Content
Orientation Program, General Introduction to environmental biotechnology
Lab Visit: Proper Demonstration of Instruments and Good Laboratory Practices
Preparation of Buffers and Reagents and Introduction to lab mathematics
Determination Procedure of Physical parameter of water quality testing by HANNA EDGE <ul style="list-style-type: none"> • pH • Temperature • Electrical conductivity • TDS • DO • Salinity
Determination Procedure of Chemical Parameter of water quality testing <ul style="list-style-type: none"> • Determination of acidity • Determination of alkalinity • Estimation of the hardness • Determination of the dissolved oxygen (Manual Method)
Determination Procedure of wastewater quality parameter <ul style="list-style-type: none"> • Determination of total, suspended, dissolved solids • Estimation of Nitrates Nitrogen • Determination of Biochemical oxygen demand • Determination of Chemical oxygen demand • Determination of Total phosphates • Determination of Sulphates
<ul style="list-style-type: none"> • Enumeration of microbial index by standard plate count method (SPC)
Microbiological techniques (Environmental Microbiology) <ul style="list-style-type: none"> • Plating methods • Streaking methods • Staining methods
<ul style="list-style-type: none"> • Enumeration of Total coliforms by Multiple tube Fermentation test(MPN)
<ul style="list-style-type: none"> • Report Writing, final monitoring by Quiz/ Viva/ Presentation