

**Industrial Biotechnology Training**  
**Plant Biotechnology (Standard)**  
**Session 2021 - 2022**

<b>Module Content</b>
Orientation Program, General Interaction and Introductory Lecture
Lab Visit: Proper Utilization of Resources and Good Laboratory Practices
Preparation of PTC hood, glassware sterilization.
Preparation of Hormone Stocks Solutions Preparation of Culture Media
Explant Preparation and Surface Sterilization
Callus Culture
Embryo Culture
Anther Culture
Meristem Culture
Micropropagation by Adventitious Bud Culture
Micropropagation by Shoot Tip (Explant)
Seed sterilization, inoculation and morphology study of seedling grown <i>in vitro</i>
Isolation and observation of Plant Protoplast from leaves (Single cell culture) using Bergman's cell plating technique and filter paper raft technique, micro chamber technique
Preparation of protoplast and its fusion.
Encapsulation of embryo for the preparation of artificial seeds
Cell suspension culture
Preparation, preservation and maintenance of Cell lines
Presentation, Report Submission and Viva voce