

MODULES FOR 1, 3 AND 6 MONTHS TRAINING/SUMMER TRAINING/DISSERTATION PROGRAM IN BIOTECHNOLOGY AT PERD CENTRE

One month Training Modules

Name of the Modules	Molecular Biology	Plant Biotechnology	Cell culture	Microbiology
Techniques covers	<ul style="list-style-type: none"> → Plasmid Isolation from bacteria → RE digestion → PCR primer design → PCR → Agarose gel electrophoresis → Gel documentation → Gel Analysis 	<ul style="list-style-type: none"> → Isolation of genomic DNA from plant → RE digestion → PCR primer design and PCR → Agarose gel electrophoresis → Gel documentation → Gel Analysis 	<ul style="list-style-type: none"> → Media preparation → Maintenance of Cell line (subculture, cell counting, cryo preservation, plating etc) 	<ul style="list-style-type: none"> → Antimicrobial activity → Characterization of microorganism → Plating techniques → CFU
Price in INR	6,000	6,000	10,000	4000
Remarks: Price may vary depending upon the cost of consumables. Special discount (20%) will be provided for enrollment of 5 students at the same time				

Three months Training Modules

Name of the Modules	Plant tissue culture	Plant Molecular Biology	DNA Barcoding	Cell culture	Molecular Biology
Techniques covers	<ul style="list-style-type: none"> → Media Preparation → Micropropagation → Callus, suspension, root and shoot culture → Histological analysis 	<ul style="list-style-type: none"> → Development of plant based molecular markers using AFLP, RFLP, ISSR → PCR → Agarose gel electrophoresis → Data scoring and analysis 	<ul style="list-style-type: none"> → Identification of ITS region → Sequencing and analysis → PCR → Agarose gel electrophoresis 	<ul style="list-style-type: none"> → Media preparation → Maintenance of Cell line (subculture, cryo preservation, plating etc) → Cytotoxicity assays: MTT assay, Alamar blue assay → Apoptosis assays using fluorescent dyes → Drug Uptake 	<ul style="list-style-type: none"> → Cloning and expression of recombinant protein in E. coli BL 21 (Plasmid isolation, RE, Ligation, PCR, Transformation, Protein purification, PAGE, WB)
Price in INR	10,000	10,000	10,000	20,000	15,000
Remarks: Price may vary depending upon the cost of consumables. Special discount (20%) will be provided for enrollment of 5 students at the same time					

Six months Training Modules

Tailor made projects in following areas

- Cell biology/ cell culture
- Plant tissue culture
- Plant Molecular Biology
- Plant Biology
- Molecular Biology/ r- DNA technology
- Microbiology

This includes design of the project, designing of experiments, record keeping and documentation, statistical analysis, data interpretation, report writing, training in manuscript preparation

Remarks: Price may vary depending upon the cost of consumables. Special discount (20%) will be provided for enrollment of 5 students at the same time