

INDUSTRIAL TRAINING MODULE

S.NO.	Module Code	Name of the Module	Techniques	Duration in Days
1	ABST-001	Basic molecular biology techniques		5 Days
		Basic level	Various culture stock preparation and its revival	½
			DNA isolation from various sources	1
			Agarose Gel Electrophoresis	½
			Isolation of RNA and agarose gel electrophoresis (optional)	1
			Restriction and digestion	½
			SDS phage (optional)	1
			Qualitative and Quantitative analysis of nucleic acid and proteins	½
2	ABST-002	Mid level	Restriction and digestion of DNA and plasmid	5 Days
			Ligation of DNA and plasmid	
3	ABST-003	Advance level 1	DNA methylation Polymerase chain reaction DNA finger printing RNA purification Reverse transcriptase PCR mRNA purification A tailing of nucleic acid Quantitative and Qualitative analysis	5 Days
4	ABST-004	Advance level 2	Restriction and digestion of plasmids/phagemids Ligation of plasmids/phagemids Constructed recombinant DNA and its screening Competent cell preparation rDNA transformation and its screening	5 Days
5	ABST-005	Polymerase chain reaction	Nucleic acid (DNA and RNA) extraction from different sources-on overview Fundamentals of PCR techniques and its scopes Short PCR Long PCR Hotshort PCR Multiplex PCR (optional) Nested PCR (optional) RT PCR optional) Analysis of PCR products upon agarose gel electrophoresis Gel DOC system	7 Days

			Purification of PCR products Gel extraction of PCR products	
6	ABST-006	Transcriptomics	Isolation of total RNA Isolation of mRNA Poly A adenylation (poly A tailing) of nucleic acids Purification of mRNA by column method	5 Days
			Agarose gel electrophoresis of RNA Gel extraction of RNA RT PCR Gel DOC system	
7	ABST-007	Transmetabolomics basic level	Isolation of chloroplast DNA Isolation of mitochondrial DNA Gel analysis by Gel DOC system	3 Days
8	ABST-008	Basic of Genetics	Competent cell preparation Bacterial transformation Bacterial transduction Bacterial transfection Bacterial conjugation Phage titration Gel analysis by gel DOC system Genomic mapping	7 Days
9	ABST-009	Blotting techniques	Fundamental o blotting techniques and its scope Southern blotting and hybridization Northern blotting and hybridization Western blotting	5 Days
10	ABST-010	Chromatography techniques	Fundamental of chromatography and its techniques Paper chromatography Thin layer chromatography Ion exchange chromatography Affinity chromatography Gel preparation chromatography Column chromatography	5 Days
11	ABST-011	DNA modification system	Essential of DNA modification and its scope DNA methylation Restriction and digestion DNA phosphorylation DNA ligation Gel analysis by gel doc system	3 Days
12	ABST-0012	DNA mutation	Concept of mutation and its application	7 Days

			Isolation of spontaneous mutant 1.Gradient plate method 2.Replica plating method	
			Mutagenesis 1.Chemical mutation 2. Physical mutation	
13	ABST-013	Immunodiffusion Techniques	Site directed mutagenesis ODD Titration SRID Counter Current Immunoelectrophoresis Rocket Immunoelectrophoresis Immunoelectrophoresis	4 Days
14	ABST-014	ELISA Techniques	DOT ELISA Antigen Capture ELISA Antibody Capture ELISA Sandwich Elisa Competitive ELISA	3 Days
15	ABST-015	Microbial Techniques	Isolation & Identification of Bacteria Pure Culture Techniques Staining Techniques Biochemical Characterization	5 Days
16	ABST-016	Plant Tissue Culture	Callus Induction Auxilliary Bud Induction Shoot Induction Root Induction Isolation of Cells	5 Days (breaks in between) week end program
17	ABST-017	Animal Tissue Culture	Media Preparation Culture Initiation Passaging of cell lines Observation of Cell cell viability assav	week end program 5 days (breaks in between)

Note:

The cost of the projects / modules varies according to the title you have selected.

Training Center @

Chennai:

9976903682, 7299953878.

REGISTRATION:

Applicant can either register online at www.abbsbiotech.com or in person.