



Chaperon Biotech Pvt. Ltd.

A Place of Discovery

Established Under Companies Act, 1956 (No. 1 of 1956)
Registered by Ministry of Corporate Affairs Govt. of India



Chaperon Biotech Pvt. Ltd. (CBPL)

A Place Of Discovery

Our vision is to be a leading biotech company in India by the year 2025

About Us

Chaperon Biotech Pvt. Ltd. (CBPL) is a registered company under the company act 1956 (No1 of 1956). The company is mainly based on Industrial training, project & R&D purpose. It is authorized to take contract projects from private as well as government firms. Our company provides training and project in the field of biotechnology, molecular biology, microbiology, molecular cloning, immunology, environmental and other department of biotechnology. We also carry business of Manufacturing, Marketing and Export of Bio-fertilizers.

Chaperon Biotech is dedicated to provide a backbone to the biological research, for proper utilization of the advancements in the field of biological sciences by taking together students, professional, academics, organizations through consultative, advisory, educative process which will provide growth and partnership opportunities for organization, academics, and students and the society and mankind as a whole. **Chaperon Biotech** works to create a platform conducive for the growth promotion and partnering in the field of biological sciences.

For the sake of the enhancement of the vast field of biotechnology in the industrial field we conduct various industrial training programs and projects for certification of students in Bioinformatics, Biotechnology, Immunology, Cloning, Microbiology, Molecular biology, Biochemistry & Enzymology. We hear in **Chaperon Biotech Pvt. Ltd. (CBPL)** provide highly efficient team which is highly qualified for work in any field of biotechnology. Here in **Chaperon Biotech Pvt. Ltd. CBPL** we have well equipped lab which have all the facilities in the world for caring out the work.

Chaperon Biotech will own its independent Research & Development wing, which will developed many molecular biology products, health care products, bio-fertilizers products and wishes to commercialize them in near future.

OUR BELIEVE

Our vision is to be a leading biotech company in India by the year 2025. We shall provide total customer satisfaction and achieve leadership in chosen markets, products and services across the globe, through excellence in technology, based on world-class research and development.

OUR TEAM:

ADVISORY COMMITTEE:

NAME	POSITION / DESIGNATION	UNIVERSITY / INSTITUTE
Er. Sarvendra Mishra	Director	Chaperon Biotech
Er. Saurabh Singh	CEO	Chaperon Biotech
Dr. I. Das	Sr. scientist	Indiana university (USA)
Dr. Rajinder Kumar	Scientist	C.S.K.H.P.K.V. Palampur (H.P)
Dr. Alok Tripathi	Sr.Professor	A.P.L.E.P.
Mr.Kunal Kumar	Research Scholar	NITK Surathkhal

FACULTY

NAME	SUBJECT EXPERT	DIGSIGNATION
Dr. Vijay Kumar	Retd. Associate Professor & Head Department of Botany Christ church College Kanpur (U.P)	Research Consultant at Chaperon Biotech
Dr. S. Shukla	Plant Biochemistry	Sr. Research Associate
Er. Gyanesahwar Patel	Biotechnology	Research Associate
Monika Patel	Microbiology	Research Associate

MODULE 15 DAYS

MODULE: - CB15A**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART OF LECTURES ON BASIC MICROBIOLOGY & MOLECULAR BIOLOGY TECHNIQUES****Technique detail: for 15 Day**

S.NO.	Laboratory techniques
1.	Bio-Instrumentation for Wet Lab.
2.	General safety instruction for working in lab.
3.	Media preparation & Culturing of Microbes.
4.	Isolation of Microbes from different sources.
5.	Primary and secondary screening of microbes.
6.	Antibiotic sensitivity test.
7.	Minimum Inhibitory concentration (MIC) Test.
8.	MDR Test.
9.	Gram staining.
10.	Identification of Microbes by Biochemical Characterization. IMViC series Test.
11.	DNA Isolation from different parts of Plant.
12.	Plasmid DNA Isolation from Bacteria.
13.	Agarose Gel electrophoresis.
14.	Estimation of Protein by Laurie's Method.

MODULE : CB15B**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURE ON BASIC & ADVANCED INDUSTRIAL MICROBIOLOGY****Technique detail: for 15 Day**

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Working with Autoclave, Hot-air Oven, and Laminar air flow (LAF), Microscope and other Microbiology laboratory instruments.
4	Preparation of cotton plug.
5	Handling of Micropipettes, Petri plates, Spreader, Inoculation loop and other Microbial tools.
6	Type of sterilization process.
7	Chemical sterilization process.
8	Physical sterilization process.
9	Media and solution preparation.
10	Type of culture media.
11	Solid and liquid media preparation.
12	Culturing of Microbes.
13	Pour plate technique.
14	Spread plate technique.
15	Various streaking methods.
16	Isolation of microbes from different sources.
17	Pure culture isolation through solid media.
18	Pure culture isolation through suspension culture.
19	Gram staining.
20	Identification of microbes by biochemical characterization. IMViC series Test
21	Maintenance of pure culture.
22	Slant preparation and sub culturing of microbes.
23	Study of growth pattern of microbes.

MODULE- CB15C

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED MOLECULAR BIOLOGY

Technique detail: for 15 Day

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	Extraction and purification of genomic DNA from plant.
9	Electrophoresis of genomic DNA.
10	Calculation of yield of DNA per gram of plant material.
11	Extraction and purification of genomic DNA from several microbes.
12	Electrophoresis of genomic DNA.
13	Determination of purity of bacterial genomic DNA.
14	Extraction and purification of plasmid DNA from E-coli.
15	Determination of purity of plasmid DNA.
16	Competent cell preparation.
17	Transfer of DNA into E-coli.
18	Blue white selection of bacterial colonies.

MODULE-CB15D

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON ADVANCED MOLECULAR BIOLOGY & IMMUNOLOGY.

Technique detail: for 15 Day

1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	ABO Blood grouping.
9	Double Immunodiffusion.
10	RH Typing of Blood sample.
11	Radial Immunodiffusion.
12	WIDAL Test.
13	Extraction and purification of genomic DNA from part of plant.
14	Extraction and purification of genomic DNA from bacteria.
15	Extraction and purification of plasmid DNA from E-coli.
16	Electrophoresis of DNA.

MODULE-CB15E

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED BIOCHEMISTRY.

Technique detail: for 15 Day

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	Protein Isolation.
9	Estimation of Protein by Bradford Method.
10	Estimation of Protein by Burette Method.
11	Estimation of Protein by Lowry's Method.
12	SDS-PAGE.
13	Carbohydrate Isolation from different samples.
14	Estimation of Carbohydrate by Phenol-Sulphuric Acid Assay.
15	Estimation of reducing sugar by Di-Nitro Salicylic Acid Assay.
16	Phyto –Chemical Analysis of Plant secondary Metabolites.
17	Enzyme Assay–Amylase Assay.
18	Isoelectric Precipitation of Proteins: Casein from Milk.

MODULE-CB15F

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED ENZYMOLOGY.

Technique detail: for 15 Day

1.	Introduction to enzymology.
2.	Sterilization and instrumentation used in enzymology.
3.	Isolation of microorganism from suitable substrate or solid waste.
4.	Pure culture Preparation.
5.	Screening of purified cultures for Enzyme activity.
6.	Identification of unknown microorganisms.
7.	Fermentation.
8.	Extraction of Crude Enzyme.
9.	Precipitation of Enzyme.
10.	Thin Layer Chromatography (depending on enzyme).
11.	Characterization of Purified Enzyme

MODULE 30 DAYS

MODULE: - CB30A**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART OF LECTURES ON BASIC MICROBIOLOGY & MOLECULAR BIOLOGY TECHNIQUES****Technique detail: for 30 Day**

S.NO.	Laboratory techniques
1.	Bio-Instrumentation for Wet Lab.
2.	General safety instruction for working in lab.
3.	Media preparation & Culturing of Microbes.
4.	Isolation of Microbes from different sources.
5.	Primary and secondary screening of microbes.
6.	Antibiotic sensitivity test.
7.	Minimum Inhibitory concentration (MIC) Test.
8.	MDR Test.
9.	Growth kinetic studies of microbes.
10.	Gram staining.
11.	Identification of Microbes by Biochemical Characterization. a) IMViC series Test. b) Starch Hydrolysis Test. c) Casein Hydrolysis Test.
12.	DNA Isolation from different parts of Plant.
13.	Plasmid DNA Isolation from Bacteria.
14.	Agarose Gel electrophoresis.
15.	Blotting Technique.
16.	Isolation of Extra cellular protein from bacteria.
17.	Estimation of Protein by Bradford Method.
18.	Precipitation of Protein By Salting out Method.
19.	SDS-PAGE.
20.	Competent Cell Preparation.
21.	Transformation.
22.	Blue-White Screening.
23.	Enzyme Assay.
24.	Fermentation.

MODULE:-CB30B**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURE ON BASIC & ADVANCED INDUSTRIAL MICROBIOLOGY****Technique detail: for 30 Day**

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Working with Autoclave, Hot-air Oven, and Laminar air flow (LAF), Microscope and other Microbiology laboratory instruments.
4	Preparation of cotton plug.
5	Handling of Micropipettes, Petri plates, Spreader, Inoculation loop and other Microbial tools.
6	Type of sterilization process.
7	Chemical sterilization process.
8	Physical sterilization process.
9	Media and solution preparation.
10	Type of culture media.
11	Solid and liquid media preparation.
12	Culturing of Microbes.
13	Pour plate technique.
14	Spread plate technique.
15	Various streaking methods.
16	Isolation of microbes from different sources.
17	Isolation of microbes from soil sample.
18	Isolation of microbes from water sample.
19	Isolation of microbes from air.
20	Pure culture isolation through solid media.
21	Gram staining.
22	Identification of microbes by biochemical characterization. a) IMViC series Test. b) Starch Hydrolysis Test. c) Casein Hydrolysis Test. d) Gelatin Hydrolysis Test. e) Catalase Test.
23	Pure culture isolation through suspension culture.
24	Maintenance of pure culture.
25	Slant preparation and sub culturing of microbes.
26	Optimization of culture condition of microbes.
27	Study of growth pattern of microbes.
28	Effect of pH, temperature, salinity, precursors and elicitors on growth of microbes.
29	Effect of physical and chemical mutagen on growth of microbes.
30	Study of inter-species and intra-species microbial interactions.

MODULE-CB30C

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED MOLECULAR BIOLOGY

Technique detail: for 30 Day

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	Extraction and purification of genomic DNA from various part of plant.
9	Electrophoresis of genomic DNA.
10	Calculation of yield of DNA per gram of plant material.
11	Determination of contaminants and concentration of DNA by spectrophotometer.
12	Extraction and purification of RNA from various part of plant.
13	Electrophoresis of RNA.
14	Extraction and purification of genomic DNA from several microbes.
15	Electrophoresis of genomic DNA.
16	Determination of purity of bacterial genomic DNA.
17	Determination of contaminants and concentration of DNA by spectrophotometer.
18	Extraction and purification of plasmid DNA from E-coli.
19	Determination of purity of plasmid DNA.
20	Determination of contaminants and concentration of plasmid DNA by spectrophotometer.
21	Southern blotting for DNA.
22	Restriction digestion of DNA by restriction endonucleases.
23	Separation of digested fragment by Electrophoresis.
24	Ligation of restriction fragment in to plasmid.
25	Competent cell preparation.
26	Transfer of DNA in to E-coli.
27	Screening of trans formed cell
28	Blue whit selection of bacterial colonies.
29	PCR
30	Electrophoresis of PCR product.

MODULE-CB30D

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON ADVANCED MOLECULAR BIOLOGY & IMMUNOLOGY.

Technique detail: for 30 Day

1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	ABO Blood grouping.
9	Double Immunodiffusion.
10	RH Typing of Blood sample.
11	Radial Immunodiffusion.
12	WIDAL Test.
13	Rocket Immuno Electrophoresis.
14	Counter current electrophoresis.
15	Gel diffusion techniques.
16	Isolation of extracellular protein from bacteria.
17	Quantitative Estimation of Protein.
18	Salt precipitation technique.
19	SDS-PAGE
20	Extraction and purification of genomic DNA from various part of plant.
21	Extraction and purification of genomic DNA from bacteria.
22	Extraction and purification of plasmid DNA from E-coli.
23	Restriction digestion of DNA by restriction endonucleases.
24	Electrophoresis of genomic DNA.
25	Electrophoresis of Plasmid DNA.
26	Restriction digestion of DNA by restriction endonucleases.
27	Electrophoresis of digested DNA.

MODULE-CB30E

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED BIOCHEMISTRY.

Technique detail: for 30 Day

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	Protein Isolation.
9	Estimation of Protein by Bradford Method.
10	Estimation of Protein by Biurette Method.
11	Estimation of Protein by Lowry's Method.
12	SDS-PAGE.
13	Carbohydrate Isolation from different samples.
14	Estimation of Carbohydrate by Phenol-Sulphuric Acid Assay.
15	Estimation of reducing sugar by Di-Nitro Salicylic Acid Assay.
16	Phyto –Chemical Analysis of Plant secondary Metabolites.
17	Enzyme Assay–Amylase Assay .
18	Isoelectric Precipitation of Proteins: Casein from Milk.
19	Effect of temperature on enzyme kinetics.
20	Construction of Maltose Standard Curve by DNS Method.
21	Extraction of Caffeine from Tea.
22	Effect of Substrate Concentration on Enzyme Kinetics.
23	Detection of Adulteration in Milk.
24	Titration Curves of Aminoacids.
25	Estimation of blood glucose by Glucose oxidase method.
26	Isolation of β -Amylase from Sweet Potato.
27	Paper Chromatography.
28	Thin Layer Chromatography
29	Estimation of protein and specific activity of the enzyme.

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED ENZYMOLOGY.

Technique detail: for 30 Day

1.	Introduction to enzymology.
2.	Sterilization and instrumentation used in enzymology.
3.	Isolation of microorganism from suitable substrate or solid waste.
4.	Pure culture Preparation.
5.	Screening of purified cultures for Enzyme activity.
6.	Identification of unknown microorganisms.
7.	Fermentation.
8.	Extraction of Crude Enzyme.
9.	Precipitation of Enzyme.
10.	Thin Layer Chromatography (depending on enzyme).
11.	Characterization of Purified Enzyme
	Total protein estimation
	I. Bradford's Method.
	II. Lowry's Method.
12.	Enzyme Assay
13.	Enzyme Kinetics
	I. Effect of pH on Enzyme Activity
	II. Effect of Temperature on Enzyme Activity
12.	SDS PAGE.
13.	Native PAGE
14.	Immobilization of Enzymes.

MODULE 45 DAYS

MODULE: - CB45A**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART OF LECTURES ON BASIC MICROBIOLOGY & MOLECULAR BIOLOGY TECHNIQUES****Technique detail: for 45 Day**

S.NO.	Laboratory techniques
1.	Bio-Instrumentation for Wet Lab.
2.	General safety instruction for working in lab.
3.	Media preparation & Culturing of Microbes.
4.	Isolation of Microbes from different sources.
5.	Primary and secondary screening of microbes.
6.	Antibiotic sensitivity test.
7.	Minimum Inhibitory concentration (MIC) Test.
8.	MDR Test.
9.	Growth kinetic studies of microbes.
10.	Gram staining.
11.	Identification of Microbes by Biochemical Characterization. a) IMViC series Test. b) Starch Hydrolysis Test. c) Casein Hydrolysis Test. d) Gelatin Hydrolysis Test. e) Catalase Test.
12.	Maintenance & storage of E.coli cell.
13.	Preparation of equilibrated Phenol.
14.	DNA Isolation from different parts of Plant.
15.	Genomic DNA Isolation from Bacteria.
16.	Plasmid DNA Isolation from Bacteria.
17.	Isolation of Mitochondrial DNA from plant.
18.	Isolation of Fungal DNA.
19.	Extraction of DNA from Fish Fins.
20.	Hot shot method of DNA extraction.
21.	Agarose Gel electrophoresis.
22.	Extraction of Protein from Plant sample.
23.	Blotting Technique.
24.	Isolation of Extra cellular protein from bacteria.
25.	Estimation of Protein by Bradford Method.
26.	Precipitation of Protein By Salting out Method.
27.	SDS-PAGE.
28.	Competent Cell Preparation.
29.	Transformation.
30.	Blue-White Screening.
31.	Enzyme Assay.
32.	Fermentation.
33.	PCR.
34.	Electrophoresis of PCR Product.

MODULE –CB45B**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURE ON BASIC & ADVANCED INDUSTRIAL MICROBIOLOGY****Technique detail: for 45 Day**

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Working with Autoclave, Hot-air Oven, and Laminar air flow (LAF), Microscope and other Microbiology laboratory instruments.
4	Preparation of cotton plug.
5	Handling of Micropipettes, Petri plates, Spreader, Inoculation loop and other Microbial tools.
6	Type of sterilization process.
7	Chemical sterilization process.
8	Physical sterilization process.
9	Media and solution preparation.
10	Type of culture media.
11	Solid and liquid media preparation.
12	Culturing of Microbes.
13	Pour plate technique.
14	Spread plate technique.
15	Various streaking methods.
16	Isolation of microbes from different sources.
17	Isolation of microbes from soil sample.
18	Isolation of microbes from water sample.
19	Isolation of microbes from air.
20	Pure culture isolation through solid media.
21	Gram staining.
22	Identification of microbes by biochemical characterization. a) IMViC series Test. b) Starch Hydrolysis Test. c) Casein Hydrolysis Test. d) Gelatin Hydrolysis Test. e) Catalase Test.
23	Pure culture isolation through suspension culture.
24	Maintenance of pure culture.
25	Slant preparation and sub culturing of microbes.
26	Optimization of culture condition of microbes.
27	Study of growth pattern of microbes.

28	Effect of pH, temperature, salinity, precursors and elicitors on growth of microbes.
29	Effect of physical and chemical mutagen on growth of microbes.
30	Primary screening of active microbes.
31	Secondary screening of active microbes.
32	Fermentation techniques.
33	Isolation and characterization of antibiotics from microbes.
34	Isolation and characterization of bacteriocin from microbes.
35	Antibiotic sensitivity test
36	Evaluation and determination of minimum inhibitory concentration (MIC).
37	Isolation and characterization of multiple drug resistant micro-organisms(MDR).

MODULE-CB45C**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED MOLECULAR BIOLOGY****Technique detail: for 45 Day**

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	Maintenance & storage of E.coli.
9	Preparation of Equilibrated Phenol.
10	Extraction of DNA from Fish Fins.
11	Hot shot method of DNA extraction.
12	Isolation of Mitochondria.
13	Isolation of Chloroplast.
14	Isolation of Mitochondrial DNA from Plant.
15	Isolation of Fungal DNA.
16	Extraction and purification of genomic DNA from various part of plant.
17	Electrophoresis of genomic DNA.
18	Calculation of yield of DNA per gram of plant material.
19	Determination of contaminants and concentration of DNA by spectrophotometer.
20	Electrophoresis of RNA.
21	Isolation of RNA from bacterial cell.
22	Isolation of Genomic DNA from Blood.
23	Extraction and purification of genomic DNA from several microbes.
24	Electrophoresis of genomic DNA.
25	Determination of purity of bacterial genomic DNA.
26	Determination of contaminants and concentration of DNA by spectrophotometer.
27	Extraction and purification of RNA from various part of plant.
28	Determination of purity of plasmid DNA.
29	Extraction and purification of plasmid DNA from E-coli.
30	Determination of contaminants and concentration of plasmid DNA by spectrophotometer.
31	Southern blotting for DNA.
32	Restriction digestion of DNA by restriction endonucleases.
33	Separation of digested fragment by Electrophoresis.
34	Ligation of restriction fragment in to plasmid.
35	Competent cell preparation.
36	Transfer of DNA in to E-coli.
37	Screening of trans formed cell
38	Blue whit selection of bacterial colonies.
39	PCR
40	Electrophoresis of PCR product.

MODULE-CB45D

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON ADVANCED MOLECULAR BIOLOGY & IMMUNOLOGY.

Technique detail: for 45 Day

1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	ABO Blood grouping.
9	Double Immunodiffusion.
10	RH Typing of Blood sample.
11	Radial Immunodiffusion.
12	WIDAL Test.
13	Rocket Immuno Electrophoresis.
14	Counter current electrophoresis.
15	Gel diffusion techniques.
16	Isolation of extracellular protein from bacteria.
17	Quantitative Estimation of Protein.
18	Salt precipitation technique.
19	SDS-PAGE
20	Extraction of DNA from Fish Fins.
21	Hot shot method of DNA extraction.
22	Isolation of Mitochondria.
23	Isolation of Chloroplast.
24	Isolation of Mitochondrial DNA from Plant.
25	Isolation of Fungal DNA.
26	Extraction and purification of genomic DNA from bacteria.
27	Extraction and purification of plasmid DNA from E-coli.
29	Restriction digestion of DNA by restriction endonucleases.
30	Electrophoresis of genomic DNA.
31	Electrophoresis of Plasmid DNA.
32	Restriction digestion of DNA by restriction endonucleases.
33	Electrophoresis of digested DNA.

MODULE-CB45E

HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC & ADVANCED BIOCHEMISTRY.

Technique detail: for 45 Day

S. No.	Lab Schedule
1	General safety instruction for working in lab.
2	Bio-Instrumentation for Wet Lab.
3	Good laboratory practice.
4	Principle and handling of laboratory equipment.
5	Basics of calculation, Weighing and Measurements.
6	Preparation of reagents, stock solutions and method of labeling and storage.
7	Process of sterilization and decontamination.
8	Protein Isolation.
9	Isolation of Protein from Plant samples.
10	Isolation of extra cellular Protein.
11	Isolation of Intra cellular Protein.
12	Isolation of protein by salt precipitation method.
13	Estimation of Protein by Bradford Method.
14	Estimation of Protein by Biurette Method.
15	Estimation of Protein by Lowry's Method.
16	SDS-PAGE.
17	Carbohydrate Isolation from different samples.
18	Estimation of Carbohydrate by Phenol-Sulphuric Acid Assay.
19	Estimation of reducing sugar by Di-Nitro Salicylic Acid Assay.
20	Phyto –Chemical Analysis of Plant secondary Metabolites.
21	Enzyme Assay–Amylase Assay .
22	Isoelectric Precipitation of Proteins: Casein from Milk.
23	Effect of temperature on enzyme kinetics.
24	Construction of Maltose Standard Curve by DNS Method.
25	Extraction of Caffeine from Tea.
26	Effect of Substrate Concentration on Enzyme Kinetics.
27	Detection of Adulteration in Milk.
28	Titration Curves of Aminoacids.
29	Estimation of blood glucose by Glucose oxidase method.
30	Isolation of β -Amylase from Sweet Potato.
31	Paper Chromatography.
32	Thin Layer Chromatography
33	Estimation of protein and specific activity of the enzyme.

MODULE-CB45F**HANDS-ON INDUSTRIAL TRAINING WITH STATE OF ART LECTURES ON BASIC PLANT TISSUE CULTURE.****Technique detail: for 45 Day**

S.NO.	Laboratory techniques
1.	General and Safety Instructions for Working in plant tissue culture lab
2.	Working with Autoclave, Hot-Air Oven, Laminar Air Flow, Microscope and other
3.	Handling of Micropipettes, Petri plates, Spreaders, Inoculation Loop and other
4.	Introduction to plant tissue culture
5.	Preparation of plant tissue culture media
6.	Type of culture
7.	Callus culture
8.	Cell suspension culture
9.	Protoplast culture
10.	Organ culture
11.	Meristem culture
12.	Root culture
13.	Haploid culture
14.	Anther culture
15.	Somatic embryogenesis
16.	Somatic hybridization
17.	Cybridization
18.	Clonal propagation

PROJECT / DESSERTATION

We provide Mini project /Academic projects/Dissertation & Research facilities to the students either pursuing in any year or completed their U.G or P.G courses from any branch of life science .The duration of the project will be based on the project which is under taken by the student. The project title will be discussed here in **Chaperon Biotech Pvt.Ltd.** Students can choose their topic of project from any field of the life science.

Fees Structure

Training Module:-

DURATION	SUBJECT	AMMOUNT (Rs.)
15 Days	Micro Biology	3000
	Molecular Biology	3500
	Biotechnology	3500
	Biochemistry	3500
	Enzymology	3500
	Immunology	3000
	Instrumentation	4000
	Food & Drug Testing	4500
30 Days	Micro Biology	5000
	Micro Biology & Molecular Biology	6000
	Biotechnology	6000
	Biochemistry	6000
	Enzymology	6000
	Immunology	5500
	Instrumentation	7000
	Food & Drug Testing	7500

45 Days	Micro Biology	6500
	Micro Biology &	7500
	Molecular Biology	
	Biotechnology	8000
	Biochemistry	8000
	Enzymology	8000
	Immunology	7500
	Instrumentation	9000
	Food & Drug Testing	10000

DUSSERTATION WORK:

Fees for Microbiology:-

DURATION	AMMOUNT(Rs.)
2 Month	10000
3 Month	12,500
4 Month	16,500
5 Month	18,500
6 Month	24,000
One year	40,000

Fees for Biotechnology:-

DURATION	AMMOUNT(Rs.)
2 Month	11000
3 Month	14,000
4 Month	16,500
5 Month	18,500
6 Month	26,000
One year	40,000

Taxonomical Study of Nematodes:

Fees Structure:

Duration	Amount is Rs
3 Month	15000/-
6 Month	28000/-
1 Year	40000/-

Note:

- The registration fees is Rs 500/, excluding the fees mentioned above
- All the taxes are included in this fees structure.

ACCOMADATION FEES:-

Duration	Fees
1 Month	4000/-
2Month	8000/-
3 Month	12000/-
4 Month	16000/-
5 Month	20000/-
6 Month	24000/-

How to Apply:-

Download the application form from www.chaperonbiotech.com & send it to our office address with a DD of Rs 500/- which is a registration fees. DD should be on the name of “Chaperon Biotech Pvt Ltd” & payable at Kanpur.

Contact Address-:

**Chaperon Biotech Pvt. Ltd.
Nita Tower, Sarvoday Nagar
Kanpur, Uttar Pradesh. 208005.
+91512-6052516, +919415582516.
+918181845269, +918181845394.
www.chaperonbiotech.com
office@chaperonbiotech.com**