

INSTITUTE OF LIFE SCIENCE

**Module 1
Biochemistry**

**Module 2
Microbiology**

Lab Training Syllabus

**Module 3
Haematology
&
Urology**

**Module 4
Molecular
Biology**

Module 1: Biochemistry

Duration: 15 Days, Fee: 3,500 + GST

- 1. General and Safety Instructions.**
- 2. Good Laboratory Practices.**
- 3. Principle and Handling of Laboratory Equipments.**
- 4. Basics of Calculations, Weighing and Measurements.**
- 5. Preparation of Reagents, Stock Solutions & Methods of Labelling and Storage.**
- 6. Process of Sterilization and Decontamination.**
- 7. Salt Precipitation.**
- 8. Solvent precipitation**
- 9. Buffer Preparation**
- 10. Qualitative and quantitative test of carbohydrates**
- 11. Qualitative and quantitative test of protein**
- 12. Casein isolation from milk**
- 13. Lactic acid detection in milk**
- 14. Determination of acid value of fat**
- 15. Salivary amylase activity assay at different temperature and pH**
- 16. Estimation of saponification number of fat**
- 17. Estimation of alkalinity of water**
- 18. Isolation of mucin from saliva**
- 19. Free dissolved CO₂ estimation in water sample**
- 20. pH determination of saliva**
- 21. Determination of pH of different water sample**

Module 1: Biochemistry

Duration: 30 Days, Fee: 5,100 + GST

1. General and Safety Instructions.
2. Good Laboratory Practices.
3. Principle and Handling of Laboratory Equipments.
4. Basics of Calculations, Weighing and Measurements.
5. Preparation of Reagents, Stock Solutions & Methods of Labelling and Storage.
6. Process of Sterilization and Decontamination.
7. Salt Precipitation.
8. Solvent precipitation
9. Buffer Preparation
10. Qualitative and quantitative test of carbohydrates
11. Qualitative and quantitative test of protein
12. Bradford's Method
13. Lowry's method
14. Casein isolation from milk
15. Lactic acid detection in milk
16. Determination of acid value of fat
17. Salivary amylase activity assay at different temperature and pH
18. Estimation of saponification number of fat
19. Estimation of alkalinity of water
20. Isolation of mucin from saliva

1. **Free dissolved CO₂ estimation in water sample**
2. **BOD estimation**
3. **COD estimation**
4. **pH determination of saliva**
5. **Determination of pH of different water sample**
6. **Detection of Thiocyanate in saliva**
7. **Quantitative determination of catalase activity in blood**

