

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 Thiocynate in saliva**
7. **Quantitative determination of catalase activity in blood**

