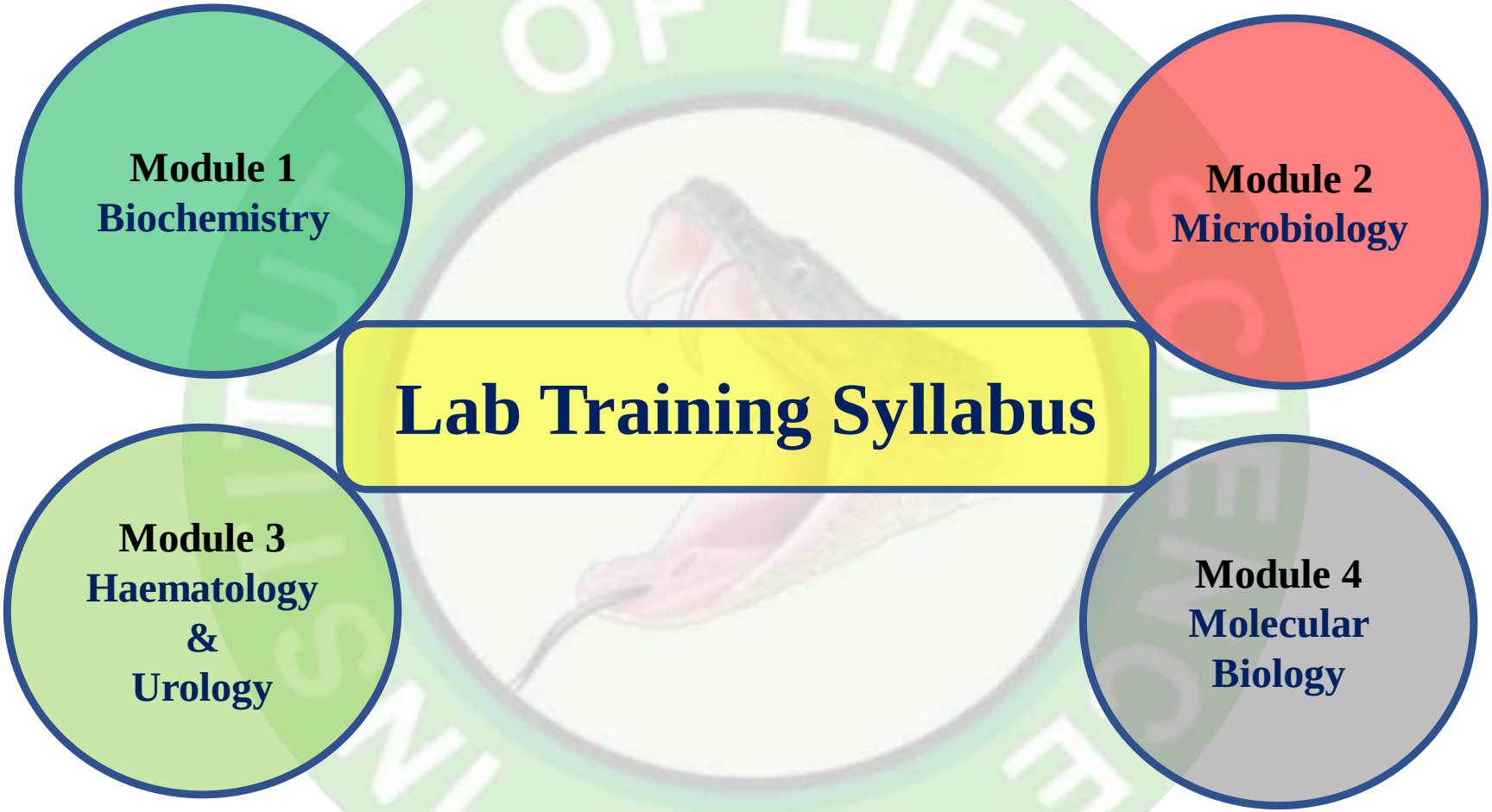
INSTITUTE OF LIFE SCIENCE



Module 4: Molecular Biology

Duration: 15 Days, Fee: 6,500 + 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. Isolation of DNA from chick/ goat spleen
7. Isolation of DNA from plant cell
8. Gel electrophoresis
9. Southern blotting
10. Study of enzyme kinetics
11. Observation of sex chromatin in buccal smear
12. Observation of stages of mitosis in onion root tip
13. Detection of lactic acid in muscular tissue
14. Detection of cholesterol in brain
15. Detection of glycogen in muscular tissue
16. Paper chromatography and TLC

Module 4: Molecular Biology

Duration: 30 Days, Fee: 8,500 + 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. Isolation of DNA from bacterial cell
7. Isolation of DNA from chick/ goat spleen
8. Isolation of DNA from plant cell
9. Gel electrophoresis
10. Southern blotting
11. Northern blotting
12. SDS-PAGE
13. Detection of ATP in various tissue
14. Study of enzyme kinetics
15. Effect of temperature of enzyme activity
16. Effect of pH of enzyme activity
17. Effect of Substrate Conc. of enzyme activity
18. Effect of enzyme conc. of enzyme activity
19. Effect of activator of enzyme activity
20. Effect of inhibitor of enzyme activity

21. Observation of sex chromatin in buccal smear
22. Observation of stages of mitosis in onion root tip
23. Detection of lactic acid in muscular tissue
24. Detection of cholesterol in brain
25. Detection of glycogen in muscular tissue
26. Paper chromatography and TLC
27. Extraction of Total Protein from Various Parts of Plants.
28. Plant tissue culture