

Code	Sul	bject Title	Cr. Hrs	Semester
ZOOL-202	Zo	ology Lab-III (Biochemistry)	1	III
Year		Discipline		
2		Botany, Zoology, Chemistry-I		

## **Biochemistry**

- 1. Tests for detection of carbohydrates in alkaline medium.
- 2. Tests for detection of carbohydrates in acidic medium.
- 3. Test to demonstrate relative instability of glycosidic linkage in carbohydrates.
- 4. Tests for detection of disaccharides.
- 5. Detection of Non-reducing sugars in the presence of reducing sugars.
- 6. Demonstration of acid Hydrolysis of Polysaccharide.
- 7. Biochemical tests for detection of different amino acids.
- 8. Separation of various protein fractions by precipitation method.
- 9. Demonstration of different solubility of lipids in various solvents.
- 10. Various qualitative Tests for detection of lipids.
- 11. Demonstration of tests for detection of Nucleic Acids (DNA and RNA)

## **Environmental Biology-I & Evolution I:**

- 1. Community analysis through different sampling techniques (quadrat, Transect).
- 2. Population dynamics of grasshoppers.
- 3. Adaptive features of animals in relation to food and environment.
- 4. Food chain studies through analysis of gut contents of locally available animals.

## **Books Recommended:**

- 1. Plummer, David T., 1990. An Introduction to Practical Biochemistry, 4<sup>th</sup> Edition
- 2. McGraw-Hill Book Company, London.
- 3. Wilson, K & Walker, J., 1994. Practical Biochemistry: Principles and Techniques, 4<sup>th</sup> Edition, Cambridge University Press.
- 4. Alexander, R.R. and Griffiths, J.M. 1993. Basic biochemical methods. Wiley Liss, New York.
- 5. Sawhney, S. K. and Singh, R., 2006. Introductory Practical Biochemistry, 2<sup>nd</sup> Edition, Narosa Publishing House.
- 6. Oser, B. L., (Latest Edition). Hawk's Physiological Chemistry, McGraw Hill Book Company.