

## **M.Sc. SEMESTER I**

### **COURSE – 5 Practical Zoology (I) LABORATORY MANUAL AND RECOERD Credits –4**

**Paper code: MZO505**

**Total Marks: 100**

#### **CONTENTS:**

Unit –1: Identification of evolutionary significant specimens and important Connecting links and biodiversity

Unit –2: Diversity of Beaks in Birds

Unit –3: Preparation of check list of Animals in a Zoo-Park or a Sanctuary or a National Park

Unit –4: Protected areas (Sanctuaries and National Parks) extinction  
And biodiversity conservation

Unit –5: Aquatic ecosystems and animal diversity

Unit –6: Preparation of Blood Smear, Cell Type Identification and  
Differential Counts

Unit –7: Osmotic Fragility of Erythrocytes

Unit –8: Extraction of DNA

Unit –9: Extraction of RNA

Unit –10: Tissues Homogenization and Fractionation by Differential Centrifugation for Isolation of Nuclei and Mitochondria

Unit –11: Separation of Proteins by Polyacrylamide Gel Electrophoresis

Unit –12: Polygene Chromosomes

Unit –13: Cell Division

**Note** - Student has to perform at list 8 experiment in the year. Some more experiments may be included as per the availability in the study center but the experiment must be of master level. List will be updated soon.