

## **Program outcome:**

### **The students gain and understand**

#### **Class: B.Sc.V Paper-I**

- The principles of evolution from the perspective of horse and humans over the years.
- The oceans are the significant source of oxygen for our planet and also in the capture & storage of carbon dioxide
- The Marine species providing important ecosystem services such as the provision of food, Medicines and livelihoods
- Microbial Role in Biogeochemical Cycling. Nutrients move through the ecosystem in biogeochemical cycles.
- The different fossils and their mode of formation etc. Such student can work as a paleontologist in research projects.
- The evolutionary process. He can become a good Zoology lecturer or evolutionary scientist.
- The fundamental principles of ecosystem and characters of any population.

#### **Class: B.Sc.V Paper-II**

- The Laws of heredity, how the characters are inherited from parents to offspring.
- How and why, there is variations among the off springs of the same parents by studying Linkage & crossing over.
- The multiple alleles, ABO blood group and Rh factor in human beings and how it is inherited from parents to offsprings, what precautions can be taken during blood transfusion, what are its consequences etc.
- The genetic engineering.
- The natural function of restriction endonucleases and how a normal bacterial cell protects its DNA from their activity.
- How insulin is produced using bacterial cells and their importance to gene technology.
- The statistical analyses provide crucial insight into many biological processes.
- Basic statistical concepts which help biologists to prepare experiments, verify conclusions and properly interpret results.
- The behavior of sex chromosomes in meiosis explains sex-linked inheritance patterns.

#### **Class: B. Sc.VI Paper-I**

- The Application oriented knowledge of Sericulture, Vermiculture poultry and animal husbandry.
- The methods of bee keeping & products of bee will help them or assist them to become a successful Apiculturist.
- The economic importance helps them to know the value of Lac & it encourages them to use those products.
- The structure and function of aquatic ecosystem, pond lay out, construction, preparation of Hatchery, nursery operations, analyze harvesting and Marketing Strategies They also learn various breeding and water quality monitoring techniques.
- The fresh water and marine water prawn culture, their preservation and processing of prawns.

### **Class: B. Sc.VI Paper-II**

- What is sterilization, types and importance of it in Human Welfare. How to become protected from them & how to take benefit from them.
- The importance of antibiotics, its applications & its role in human welfare etc.
- The normal microorganisms found in & outside body of man and they will take care of it & body also.
- The different microscopes, their parts, their working mechanism etc. and he/she is able to continue research in research laboratories, he/she is able to get jobs in medical laboratories, research labs etc.
- The fundamental principles of nanotechnology and their application to biomedical engineering.
- The study of nanotechnology is strongly connected to the latest innovations in the field.
- The basic principles and concepts of biology, computer science and mathematics.
- The Current and potential applications of genome research.
- The proteomics in agriculture, ecotoxicology and human health.
- Definitive test for Creutzfeldt-Jacob disease, Lyme disease, Hepatitis B and Herpes.
- The CT or MRI scan can be used to visualize the whole of the chest cavity or abdominal cavity.
- The uses of types radio isotopes in cancer radiation therapy.

### **B.Sc. III sem:**

- The working of life at molecular level. Although these are of biochemistry branch, thorough understanding of these topics is needed for zoology students.
- The nature, manipulation of nature or the life, etc. The knowledge of molecules and energy, to successfully understand the phenomenon of life.
- The Concepts and terms in embryology.
- The GIT & its accessory glands and their secretion.
- The defective factors for cardio vascular diseases & coronary heart diseases.
- The importance of water in body after studying excretion.
- The fatigue of skeletal muscle after strenuous workout and also understand that Muscle fatigue refers to the decline in muscle force generated over sustained periods of activity or due to pathological issues.
- The neurotransmitters control heart function, depression, emotions, fear, fight, pain etc.
- Endocrine glands that secrete their products, hormones, directly into the blood rather than through a duct.
- Hormones that regulate metabolism, growth and development, tissue function, sexual function, reproduction.
- The use of vitamin and mineral supplements with respect to their potential benefits and risks to health.
- The toxicity symptoms caused by excess consumption of certain fat-soluble vitamins.

### **B.Sc. IV sem:**

- The Sources and energy utilization inside the cell.

- The Endomembrane system, Mitochondria, chloroplast Cytoskeleton.
- The cellular components underlying mitotic cell division.
- The role of p53 protein in preventing cell ageing and tumor formation.
- The Apoptosis is that is often called programmed cell death. A cellular cleanup crew rapidly mops up the remains.
- The animal behavior. Because man is surrounded by some animals. He must depend on animals many times, for survival. He is also able to get jobs in animal husbandry, wild life services, veterinary services, medical services etc.
- The tissue structures at the microscopic level in order to understand their physiological and anatomical functions.
- The Histopathology, the microscopic study of diseased tissue, which is an important tool in anatomical pathology.