

## **Govt. Degree College, Kanda, Bageshwar**

### **Department of Zoology**

#### **Programme Outcomes**

The programme in Zoology aims to equip students with recent advances in Zoology from organismic to reductionist biology.

It also aims to empower students to understand the challenges of society and the country that falls into the realms of Zoology, such as Aquaculture, Reproductive health, Behavior and Biological time keeping, Cancer Biology, Microbiome and their roles in health and diseases, Bioremediation of pollutants and pesticides, etc.

It also offers students to a series of elective courses so that they can choose to specialize in the specific area of their interests in Zoology.

The open elective has been chosen to attract students from diverse interdisciplinary areas of sciences, such as Anthropology, Environmental studies, Biomedical Sciences, etc.

This course is designed to ignite the inquisitive mind to enter in to research in interdisciplinary areas. The fourth semester offers a total of 16 elective courses, which for logistics of programme management, are divided in to four streams, where a student has to choose a stream.

In the entire course, the major emphasis is on skill-based training into socially relevant areas of Zoology. It is expected that a student after successfully completing the programme would sufficiently be skilled and empowered to solve the problems in the realms of Zoology and its allied areas.

They would have plethora of job opportunities in the education, environment, agriculturebased, and health related sectors.

The bright and ignited mind may enter into research in the contemporary areas of Zoological/Biological Sciences.

The broad skills and the deeper knowledge in the field would make them highly successful and excellent researcher in advanced areas of research in the Biological sciences.

#### **Course Outcomes**

Under NEP the duration of course leading to Degree of Bachelor of Sciences (B.Sc.) in Zoology shall be of six semester :-

There shall be six semester consisting theory papers and practical papers.

## **SEMESTER I**

Paper I :- Animal Physiology and Biochemistry

It will enhance the basic knowledge about the different systems of an organism and the clinical study of biomolecules.

## **SEMESTER II**

Paper I :- Genetics and Cell Biology

It will help students to pursue the initial fundamentals required for future projects and higher studies.

## **SEMESTER III**

Paper I :- Molecular Biology, Toxicology and Histology

It will help to inculcate the evolutionary basis of various animals and their development. It will also address the present situation of animal diversity.

## **SEMESTER IV**

Paper I :- Microbiology and Animal Behaviour

It will help students to identify the concepts about various Applied sciences and Medical laboratory techniques related to concerned area.

## **SEMESTER V**

Paper I :- Non-Chordates

Paper II :Chordates

It will help to develop the knowledge on taxonomy of insects.

Also, the conservation of wild animals to enhance the economy gained by the zoological content present in the environment.

## **SEMESTER VI**

Paper I :- Developmental Biology of Vertebrates

Paper II :- Basic Mammalian Endocrinology.

All the above POs will lead to a mind that can develop modern technologies to address the problems and to give solution to it.

## **Specific Objective**

### **CERTIFICATE COURSE IN CLINICAL DIAGNOSTICS & BIOCHEMISTRY**

#### **YEAR 1**

This will help students to generate employment in the field of clinical & medical lab/institutions/gene bank/stem cell culture/Pharma companies etc.

### **DIPLOMA IN MOLECULAR SCIENCES & CLINICAL MICROBIOLOGY**

#### **YEAR 2**

This will help students to develop the scientific ability in the field of toxicological, Histological, Microbiological, Molecular labs, various Zoological Parks, National Parks, Wildlife Sanctuaries.

### **BACHELOR OF SCIENCE (ZOOLOGY)**

#### **YEAR 3**

This will help students to develop the basis of Animal diversity and its development, which can generate various academic/Research jobs and various other jobs in the field of In-vitro labs, case study of endocrinology in medical labs etc.