

"Education for Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

## **VIVEKANAND COLLEGE, KOLHAPUR**

(An Empowered Autonomous Institute)

**Department of Zoology**

**2024-25**

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### **Course Outcomes**

#### **Class - B.Sc. I Semester I and II**

##### **DSC-1008A- Paper I Animal Diversity**

On completion of the course, students are able to:

- CO1. Understand identification, classification, evolution and history of phylum Non Chordates
- CO2. Understand about the Non Chordate animals, Morphology and anatomy
- CO3. Understand the economical importance of some animals.
- CO4. Understand identification, classification and history of phylum Chordate.
- CO5. Understand the basic concepts, characteristics, morphology of chordates.

##### **DSC-1008B Paper II Comparative Anatomy and Developmental Biology of Vertebrates**

On completion of the course, students are able to:

- CO1. Understand comparative aspects the Integumentary System, Skeletal System, Digestive System, Respiratory System, Circulatory System, Urinogenital System, Nervous System, Sense Organs
- CO2. Understand Early Embryonic Development
- CO3. Understand Control of Development
- CO4. Understand Chick embryology and Development
- CO5. Acquire skill in developmental biology

#### **Class - B.Sc. II Semester III and IV**

##### **DSC1008C- Mammalian Physiology and Biochemistry**

###### **Paper III- Physiology and Biochemistry**

After completion of this course students will be able to

- CO1. Understand how different system works coordinated to maintain homeostatic in the body.
- CO2. Illustrate the endocrine system, carbohydrate, lipid and protein metabolism.
- CO3. Apply the knowledge of physiology and biochemistry in disease /health related problem.
- CO4. Distinguish the functioning of organs and cells of which they composed.
- CO5. Interpret the biochemical pathways and enzyme action, Compile interaction and interdependence of physiological and biochemical process.

##### **DSC1008D- Cell Biology, Genetics, Evolution and Ethology**

After completion of this course students will be able to:

- CO1. Define the basic terms in cell biology and genetics.  
CO2. Explain the ultra-structure and function of cell organelle.  
CO3. Explain phenomenon of genetics and genetic mutations.  
CO4. Interpret the process of origin of evaluation and its evidences.  
CO5. Able to understand the sex determination mechanism in animals. • Able to understand the animal behavior.

**Class - B.Sc. II Semester V and VI**

**ZOOLOGY – DSE 1008 E1 & DSE 1008 E2:**

Molecular Biology and Biotechniques and Animal Biotechnology

On the completion of this course student will be able to,

- CO1. Understand the concept of gene and central dogma of molecular biology  
CO2. Understand the techniques of molecular biology in the field of research  
CO3. Compare the genetically modified organisms  
CO4. Understand the cell and tissue culture techniques  
CO5. Implement cell and tissue culture techniques in laboratory

**ZOOLOGY – DSE 1008 E3 & DSE 1008 E4:**

Developmental Biology I and Developmental Biology II

On the completion of this course student will be able to,

- CO1. Memorise structure of reproductive system and neuroendocrine regulation  
CO2. Understand the chick embryology  
CO3. Interpret the process of early embryonic development in mammals  
CO4. Distinguish fundamental process of development  
CO5. Describe process of gametogenesis, fertilization; types of cleavage and eggs

**ZOOLOGY – DSE 1008 F1 & DSE 1008 F2: Immunology I and Immunology II**

On the completion of this course student will be able to,

- CO1. Understand the concept of immune system  
CO2. Understand the functioning of immune system  
CO3. Execute serological testing in laboratory  
CO4. Distinguish between immune responses  
CO5. Understand the types of hypersensitivity and autoimmune diseases

**ZOOLOGY – DSE 1008 F3 & DSE 1008 F4: Ecology & Toxicology and Aquatic biology**

On the completion of this course student will be able to,

- CO1. Understand basic knowledge about ecology  
CO2. Differentiate between toxins and toxic effects  
CO3. Understand aquatic biomes and its functioning  
CO4. Understand the marine biology and adaptation in marine animals  
CO5. Demonstrate the physio-chemical factors of aquatic biomes

  
G.K. Sontakke

**HEAD**  
**DEPARTMENT OF ZOOLOGY**  
**VIVEKANAND COLLEGE, KOLHAPUR**  
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