## Rajiv Gandhi Mahavidyalaya, Mudkhed Department of Zoology

### **Program Outcomes:**

After completing the program of B.Sc in Zoology, the students will be able to ---

- PO1. Communicate scientific information through effective formal and informal methods generally used in sciences.
- PO2. Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms.
- PO3. Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment.
- PO4. Acquire the skills in handling scientific instruments, planning and performing in laboratory experiments.
- PO5. Understanding of environmental conservation processes and its importance, pollution control, biodiversity and protection of endangered species.
- PO6. Gain knowledge of Agrobased small scale industries like sericulture, api culture, fish farming and vermicompost preparation.
- PO7. Acquire time management and self-management skills.
- PO8. Understands the complex evolutionary processes and behaviour of animals.
- PO9. Develops empathy and love towards the animals.
- PO10. Correlates the physiological processes of animals and relationship of organ systems.

#### **Program Specific Outcomes:**

After completing the program of B.Sc in Zoology, the students will be able to ---

- PSO1 Understand animal interactions with the environment and identify the major group of organisms with an emphasis on animals and classify them within a phylogenetic framework.
- PSO2 Analyse the relationships among animals, plants and microbes.
- PSO3 Ability to connect and apply biological knowledge to other disciplines and integrate knowledge into their personal and professional lives.
- PSO4 Understand the nature and basic concepts of cell biology, genetics, taxonomy, biochemistry, physiology, ecology, zoogeography and applied zoology.
- PSO5 Demonstrated a broad understand of animal diversity, including knowledge of the scientific classification and evolutionary relationships of major groups of animals.

PSO6 Understanding the morphology and functional characteristics at cellular and subcellular level.

#### **Course Outcomes**

After completing the course in Zoology, the students will be able to ---

#### Course No -CCZ-III, Paper -VI, Course Title: Physiology.

- 1. Monitor their blood pressure and identify blood groups
- 2. Understand function and types of heart & circulatory system.
- 3. Appreciate the basic functions of Kidney, main function of nerves.
- 4. Learn the structure and function of endocrine glands.
- 5. Understand the structure, development and function of reproductive organs in human.
- 6. Acquire and learn the mechanism of hormone action.

#### Course No -CCZ-IV, Paper -VII, Course Title: Biochemistry

- 1. Understand the chemical structure and functions of various biomolecules.
- 2. Learn the signalling of biomolecules in cell membrane.
- 3. Understand the correlation between metabolism of different types of biomolecules.

#### Course No -CCZ-IV, Paper -VIII, Cell Biology and Genetics

- 1. Understand the structure and function of the cell as the fundamentals for understanding the functioning of all living organisms.
- 2. Understand structure and various cellular functions associated with the macromolecules found in cells.
- 3. Acquire knowledge of Mendelian, Genetics and its extension.
- 4. Graduates will be able to explain and interpret various processes, phenomena, states and evolutionary tendencies at a biological system level.

#### Course No -CCZ-IV, Paper -IX: Evolutionary Biology and Genetic Engineering.

- 1. Understand the theories and concept of evolution.
- 2. Learn the process of evolution in animals.
- 3. Understand the patterns of evolutionary changes in animals.
- 4. Understand the organization and functions of genetic material in the living world.
- 5. Understand the Recombinant DNA Technology.

## Course No -CCZP-II, Paper -X: Physiology and Biochemistry.

- 1. Students will be able to improve the skills in microscopy, slide preparation, observations and laboratory techniques.
- 2. To acquaint the students with operations of the different laboratory equipment.
- 3. Ability to understand the estimation of blood cell counts, Haemoglobin content in humans.

- 4. Ability to understand the detection of blood groups of humans.
- 5. To acquaint the students with operation of clinical procedures for blood & urine analysis.

# Course No -CCZP-II, Paper -XI, Cell Biology, Genetics, Evolutionary Biology and Genetic Engineering.

- 1. Students would be able to prepare temporary squash preparations of onion root tips for mitosis.
- 2. Demonstrate the genetic traits in man.
- 3. Ability to culture Drosophila files in the laboratory.
- 4. Ability for mounting of salivary glands of Drosophila larvae.
- 5. Students are able to understand the outline of Genetic engineering.
- 6. Ability to learn the role of Genetic Engineering in biology.