

ZOOLOGY COURSE OUTCOMES

COURSE -I: Animal Bio diversity of Invertebrates

After completion of the course, the student is able to

- * understand about significance of biodiversity of invertebrates.
- * know about general characters, special features and classification of invertebrates
- * understand about economical importance of phylum such as Annelida, Arthropoda, Mollusca.
- * learn scientific names of invertebrates animals.
- * know about structure, life cycle of parasites and their diseases such as protozoans and helminthes

Course-II: Animal Diversity-Chordates and Zoogeography

After completion of the course, the student is able to

- * observe the vertebrates in surroundings in Palamaner
- * learn the general characters, special features and classification of chordates.
- * know the scientific names of vertebrates.
- * know about living fossils of vertebrates
- * understand the causes of endangered animal species such as domestic sparrow.
- * describe the adaptation in the structure of various organs of vertebrates.
- * learn the Geographical features and its distribution of fauna in different regions of the world.

Course-III: Cytology, Genetics, Evolution

After completion of the course, the student is able to

- * understand about basic concept of course.

- * acquire knowledge to prokaryotic and eukaryotic cell with examples
- * understand the structure and role/mechanism/functions of cell organelles.
- * learn about classical genetics.
- * learn about human karyotyping and chromosomal disorders.
- * use the scientific terminology and improve the observation skills
- * understand the origin of life, evolution theories, isolation mechanism and speciation
- * build up observation skill through visit to museum and in practicals.

Course-IV :- Embryology, Physiology, Ecology, and Behavior

After completion of course, the student is able to

- * understand the types of cleavage and types of eggs .
- * understand the process of gametogenesis.
- * Acquire knowledge on the types and role of placenta in vertebrates
- * understand the significance of foetal membranes.
- * understand about working as well as functions of organ systems.
- * gain knowledge on the significance of biotic and abiotic components.
- * improve the positive attitude towards environment.
- * identify a variety of habitats within the ecosystem.
- * know the differences between quantitative and qualitative surveys in field.
- * identify adaptations of different species and understand its purpose.
- * identify fauna and flora using simple keys through field trip/field study.
- * learn the significance of bio-geo-chemical cycles
- * understand about inter and intra relation between animals and plants.
- * understand the types of behavior, learning and learn the biological rhythms with examples.

Course - V: Animal Biotechnology

After completion of the course, the student is able to

- * understand the tools and techniques of r.DNA technology
- * learn the scientific terminology related with biotechnology.
- * know about acquired knowledge on preparation of culture media, types of culture.
- * understand the process, advantages of IVF and embryo transfer.
- * know about process of gene cloning, as well as advantages o transgenic animals.
- * understand the significance of fermentation.
- * know about the applications of microbes.
- * learn about the applications of biotechnology.

Course - VI:- Animal Husbandry

After completion of the course, the student is able to

- * understand the principles of poultry and dairy farm.
- * know the differences between local and hybrid cattle and buffaloes.
- * learn about scientific terminology related with animal husbandry.
- * learn about advantages of in and cross breeding.
- * know about names of exotic cattles
- * understand about how to maintain the poultry shed.
- * learn the disease treatment and precautions in poultry.
- * know about purpose of vaccination.
- * understand the care and management of calf.
- * understand the preparation and purpose of nutritional requirements

Course- VII-(A) -Elective paper

Immunology

After completing of the course, the student is able to

- *understand the basic concepts of Immunology.
- *learn the types of immunity.
- *understand the types, structure and role of cells and organs of immune system in human.
- *learn the scientific terminology as well as definition of scientific words related with immunology.
- *understand the mechanism of immune system.
- *acquired knowledge on causes and types of allergy.
- *understand the purpose of vaccines.
- *Learn the purpose of antigens and antibodies.
- *Understand the application of mono clonal antibodies.

Cluster elective - Aquaculture -VIII -B

Cluster Elective paper:-VIII-B-1 Principles of Aquaculture

After completing of the course, the student is able to

- *acquire knowledge on significance of aquaculture.
- *learn about present status of aquaculture.
- *understand the types of culture system and culture practices.
- * know about cultivable fishes and non cultivable fishes.
- * acquire knowledge on fin and shell fishes and sea weed culture.

Cluster Elective paper: -VIII-B-2 Aquaculture Management

After completing of the course, the student is able to

- * understand the definition, types and significance of breeding in cultivable fin and shell fishes.
- * know about definition of scientific words
- . *know about how to prepare probiotics and their advantages..
- * acquire knowledge on fish pathology.
- *know about soil and water quality management for fin and shell fishes culture.
- *know about how many hatcheries available in government and private sectors as well as purpose of fish and prawn hatcheries.
- *know the formula and preparation of aqua feed.
- *understand the principles of aquaculture economics as well as fisheries extension.
- * know institutions and hatcheries related with aquaculture.

Cluster Elective paper: VIII-B-3 Postharvest Technology

After completing of the course, the student is able to

- * know the principles of preservation of marine and fresh fishes
- * know the processing and preservation of products and by-products.
- * understand the significance of seaweed products.
- * learn scientific words and definition related with products and quality assurance.
- .. *understand the identification of hazards in processing of fish
- * understand scientific research skill/attitude / techniques.