Course outcomes: Department of Zoology (Major)

After completing the course contents students are able to developed in following respects-

**Paper 101: Biosystematics and taxonomy**

Outcome

CO1  Student are able to understand the fundamental principles of systematic in which the animals are how to classify according to their characters and what are the theories which have to followed for classification is studied. International rules of nomenclature and classification is studied.

**Paper 102: Animal diversity (Non chordates)**

Outcome

CO2  Different groups of invertebrate animals are studied in this course including Protozoa, Porifera, coelenterate, Plathylhelminthes, Aschelminthes, Annelida, Arthropoda, Mollusca and Echinodermata. General characters and classification upto order are studied. Some special features, organs, pathogenecity, life history and significance are studied here.

**Paper 103: Practicals**

Outcome

CO3  Dissections of different systems of invertebrate animals are to be studied such as leech, cockroaches, pila and prawn etc.

CO4  Temporary slides are prepared from different organs to study the details of their structures prepared by students.

CO5  Prepared slides are studied in this part to understand the structures and arrangement of different muscular regions.

CO6  Study of museum specimens:- Identified and classified the specimens which are present the departmental museum by the students for a practical knowledge of them.

**Paper 301: Comparative Anatomy and Histology**

Outcome

CO7  In this segment we teaches about the comparative structures of heart, aotic arches, kidney, balancing organ, hearing organ, thyroid, respiratory organs, brain of different animals which give them a definite idea not only the structure but also the structural development of that organ and how they become modified according to their need and environment.

CO8  In this part we teaches about differentiation and organization of cells and maintenance of tissues. It helps to get a better idea about their structure and function.

CO9  Study of different dye and stains help the student to get a practical knowledge of handling the tissues for microtomy studies. It helps them for laboratory preparations and expertise in laboratory techniques.
Paper 302: Cell biology

Outcome

CO10 From this segment of the syllabus student aware about the size, shape, structure and function of cells and different cell organelles. This will help the students for a better understanding of cell and its cycle.

Practical 303:

Outcome

CO11 Practical application of cellular components are to be studied by the help of this part a student will able to handle the cells and tissues with higher knowledge.

Paper 501: Animal physiology

Outcome

CO12 The entire animal's functions of the body are studied in this part. It includes nutrition, Respiration, heart, excretion, nerve physiology etc in which all structure, function, process and control are to be studied.

Paper 502: Biochemistry and bioenergetics

Outcome

CO13 All the biochemical components of the body system are studied. It helps the student to get a view about the chemical compositions of different chemical compounds such as enzymes, hormones and other secretions. It also includes the pathway and chemical which are responsible for the energy production in our body.

Paper 503: Endocrinology and immunology

Outcome

CO14 This paper gives an idea about the glands which works inside the body and secretes a chemical called hormone. How it is classified, how it works and the regulation of these hormones are discussed here. It give a clear picture of its function.

Another part includes immunology which deals with a system of defence by some internal secretions antibody-antigen reaction.

Paper 504: Biological techniques and biostatistics

Outcome

CO15 Biological studies needs some equipments for it analysis of different functions. In this chapter students may understand about the quantitative and qualitative results.

Statistics used in biology. What are the parameters, what are the methods of determination, and how it analyzed are to be taught here.

Paper 505 and Paper 506: Practical Physiology

Outcome

CO16 The syllabus covers the practical knowledge about blood and its analysis which helps a student for a laboratory technician course.
Programme Specific outcome

Department of Zoology

There are different scopes in different areas like sericulture department as demonstrator, care taker of the farm, trainer for others etc.

In the department of Fisheries as extension officer, care taker, induced breeders, management, marketing, aquaculture like breeding and rearing of ornamental fishes either local or exotic.

In case of self employment apiculture, sericulture, fisheries and lac culture are the important areas are covered by zoology.

Zoology students may absorb in tea gardens as expert of tea pest, and in agriculture department the students are employed as expert of biomass and bio gas technology.

Pollution which is a burning problem of modern days, zoology students may help in this regard as using ecological knowledge can maintain the equilibrium.

Pathology laboratory needs technician for different analytical purposes and in forensic laboratory also need so, the zoology student may be treated as key persons.

Beside these in higher studies in different curriculum the students of zoology may be engaged such departments are Zoological Survey of India, Archeology, Museum curator, wild life management, wild life documentation and photographer, food processing etc.

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