Sr. No.	Course Code	Course Title	Course Objective	Expected Outcome
1	ZOO-101	Mammalian Anatomy, Histology and Physiology of Urinary system; Non Chordate Animal Diversity, Genetics, Animal Biotechnology and Economic Zoology	This course is designed to acquaint students with Mammalian anatomy and Physiology. to acquaint students with the basic structure, internal anatomy and functional mechanism of human kidney and related diseases. to acquaint students with the general plan of vertebrate systems by studying representative types (animal) to acquaint students with the concept biotechnology and techniques of animal tissue culture and various lab equipments.	• Know about the mammalian anatomy and physiology which prove helpful to them in research field or basic sciences. • Learn the Learning of anatomy and physiology of kidney helps students to know about the structural peculiarities and what to do to maintain health of kidney. Students may also know about the kidney related diseases and their remedies and prevention measures. • Shall learn tools, techniques, types and of applicability of animal tissue culture. • Acquainted with the latest technological developments in the field of Biotechnology and animal tissue culture. • Students also become familiar from laboratory equipments and their uses in this field.
2	ZOO-103	Mammalian Anatomy, Histology and Physiology of Blood, Cardiology, Non Chordate Animal Diversity, Cell Biology and Genetics	This course is designed to acquaint students with Mammalian anatomy and Physiology of blood. This course is designed to acquaint students with anatomical	• Students will understand the morphology and anatomy of cardiac tissue and blood. • Students will also learn about their functioning, importance,

			and histological study of Heart and cardiac tissue and its physiology. Understand the basics of taxonomy. To understand basic Taxonomy and diversity of invertebrate animal and vital physiological processes and their importance. Will learn about Cellular organization and cell structure and types. Able to understand basic concepts of classical genetics and their applications.	abnormalities, causes for abnormalities and diseases or disorders develop due to this. • Shall learn about the taxonomy will make students master in identification of organisms which is very much in demand in zoological field. • Able to understand basic concepts of cellular organization and cell structure, types and importance. • Students will also able to understand and apply their applications after studying classical genetics.
3	ZOO-201	Animal diversity (Nonchordates), Parasitology, Genetics & Animal biotechnology	Students will aware of basics of nonchordates Students will learn to identify non-chordates from their special features Student will become familiar with important phenomena of few nonchordates. Student will know about economic improtance of various parasites. to acquaint students with the concept biotechnology and techniques of animal tissue culture and various lab	• Students will be aware of basics of nonchordates. • Students will learn to identify non- chordates from their special features. • Student will become familiar with important phenomena of few nonchordates. • Student will know about economic improtance of few pathogenic and other parasites, their host and their

			equipments.	pathogenicity.
4	ZOO-202	Animal diversity (Chordates), Human histology, Mammalian physiology and endocrinology	This course is designed to: Students will aware of basics of chordates Students will learn to identify chordates from their special features Student will become familiar with important phenomena of few chordates. Students will acquaint with Mammalian anatomy and Physiology. They acquaint with the basic structure, internal anatomy, histology and functional mechanism of various human organs of digestive system and basic tissues. They acquaint with the basic structure, internal anatomy, histology and functional mechanism of various human endocrinal systems and glnds.	• Students will be aware of basics of chordates. • Students will learn to identify non- chordates from their special features. • Student will become familiar with important phenomena of few chordates. • Students will become master in identification of histolgical structures, to identify abnormalities regarding histological arrangements and physiological aspects. • Students will came to know about the abnormalities and their effects associated with endocrinal system.
5	ZOO-204	Animal diversity (Nonchordates & chordates), insect vectors & diseases	Students will aware of basics of nonchordates and chordates. Students will learn to identify non-chordates and chordate organisms from their special features. Student will become familiar with important phenomena of few nonchordates and chordates.	• Students will be aware of basics of non chordates and chordates. • Students will learn to identify non- chordates and chordates from their special features. • Student will become familiar with important phenomena of few chordates. • By studying the representative

			Students will acquaint with insect vectors and their role in spreading and causing diseases.	type of non-chordate and chordate representative type, they will learn and understand the arrangement, structure and functioning of various human systems. • By studying types, habitat of various vectors prove beneficiary for students to understand role of vectors in paracytology and their control will help society in controlling the spread of paracytes.
6	ZOO-205	Animal diversity (chordates), fishery biology, wildlife of India, aquatic resource &management	This course is designed to: Students will aware of basics of chordates Students will learn to identify chordates from their special features Student will become familiar with important phenomena of few chordates. Students will aware of basic fishery biology, Identification of few fresh water and marine water fishes, Fishing gears and nets, boats and their operating system. Some basic information about home aquarium (Establishment, construction and management).	• Students will learn to identify chordates from their special features. • Student will become familiar with important phenomena of few chordates. • By knowing about fishes, their identification, their importance, their management, catching, handling and storage practices. Students will be benefited by gaining knowledge about establishment of aquarium, their management, aquarium fishes, their diseases and

			Students will learn about wildlife, their significance and their management and conservation.	remedies. This will prove helpful them in self earning process or even can sattle small business. • By gaining proper knowledge about wildlife, tools, laws, NP and Santuries, students can help society in preservation and conservation of wildlife and will also prove helpful them in preparing of competitive examinations.
7	ZOO-301	Ecology, animal diversity (Nonchordates)	Students will aware about ecology and biotic community Students will know about structure and function of ecosystem Student will become familiar with type of ecosystem Students will understand the importance of living organisms, their interrelationships and environment, that will encourage them to protect environment and various life forms. Students will learn about life cycle of some representative invertebrate animals.	• Students become familiar with the ecology • Students aware about what is ecosystem and its important • Students will know how ecosystem is form and functioning • These are basic needs for conserving nature • Students will involve in protection and conservation activities of environment and other natural resources • This will help students to understand well the anatomy and physiology of organisms.
8	ZOO-302	Aanimal diversity (Chordates)	Students will learn about life cycle of some representative vertebrate	• Students will gain knowledge about human anatomy and

			animals, Some general topics which cover their behaviour, patterns of living, adaptations,etc.	physiology by comparing them with studying life cycle of vertebrate animals.
9	ZOO-303	Animal biochemistry	Students will aware about scope of biochemistry Student will become familiar with basic structure of monosaccharides, disaccharides, polysaccharides, Student will know about various biological significance of Carbohydrates and proteins.	• Students become familiar with the biochemistry • Students develop skills to identify the carbohydrates and protein • Students can classify carbohydrates and protein • Students will know the basic structure of various organic food component • These are basic needs for any professional lab practices
10	ZOO-304	Cytology and cancer biology	Students will learn about basic knowledge about types and working of different kinds of microscopes, Electrophorasis techniques and their applications. Students will aware about cancer, its types, types of cancer tumours, characteristics of cancer cell, onchogenic viruses and life cycle.	• Students will become familiar and gain knowledge to use such different lab. equipments and their applications. • Students will become familiar with causes of cancer, types of cancer, anatomy of cancerous cell, prevention measures of cancers.
11	ZOO-305	Pollution, cytological/ histotechnology techniques	Students will learn about types, causes of pollution.	• Students become familiar with causes and types of pollution. It will help them to understand properly about

			Students will learn about histotechnology and permanenet slide preparation.	causes of pollution and this will help in prevention of pollution. • By studying the Histotechnology student will gain the knowledge about preparation of histological permanent slides. That will help them to earn.
12	ZOO-307	Poultry, fisheries, animal diversity (chordates), molecular biology & genetics	Students will learn about poultry farming. Students will learn basics of molecular biology and genetics.	• The knowledge of poultry helps student to establish their own poultry farm or may serve as consultant. • Students will be familiar with molecular biology and some basics laws of genetics. This will help them to improve their knowledge in this field will prove helpful them in their research work.
13	ZOO-308	Human physiology	Students can learn about the functions of different human systems and their significance.	• Students will gain knowledge about different human systems and their physiological processes will help them to understand any abnormalities or diseases cause by metabolic errors.
14	ZOO-309	Animal biochemistry & metabolism	Students will aware about scope of biochemistry Student will become familiar with basic structure of carbohydrates, proteins and lipids and their metabolism.	• Students will gain knowledge about basic structures of carbohydrates, proteins and lipids. The study of metabolism will help them to understand physiology.

15	ZOO-310	Toxicology, animal biotechnology, animal behaviour, developmental biology	to acquaint students with the concept biotechnology and techniques of animal tissue culture and various lab equipments. To acquaint students with patterns of animal behaviour. To acquaint students with basics of embryology, its modern applications.	• Students will gain knowledge about various culture techniques and application of tissue culture. • Students will become familiar with different types of animal behaviour and their importance and applications. • Students become handy in some practical aspects of embryology. This will help them to work in IVF laboratories which is in great demand now a days.
16	ZOO-311	Apiculture , sericulture	Different aspects of Apiculture and Sericulture.	• By studying Apiculture and Sericulture, students can set their own Apiculture or/and Sericulture business or consultation.