GOVERNMENT DEGREE COLLEGE

NANDIKOTKUR, Nandyal (Dist.,)

DEPARTMENT OF ZOOLOGY

Programme Outcomes (POs)
Programme Specific Outcomes(PSOs)
&
Course Outcomes (COs)

POs, PSOs & COs Mapping

PROGRAMME OUTCOMES

Students admitted in to B.Sc. Programme are expected to acquire the following outcomes

PO1	**Domain Knowledge:** Students understand the basic scientific principles and theories related to various phenomena in their disciplines and their relevance in the day-to-day life .Students develop demonstrating comprehensive knowledge and understanding of one or more other disciplines that form a part of an undergraduate programme of study.
PO2	**Communication Skills:**Students able to express thoughts and ideas effectively in writing and orally and communicate with others using appropriate media, confidently share views and express herself/himself,
PO3	**Critical thinking:**Student will be able to analyze and synthesize data from a variety of sources and draw valid conclusions and support them with evidence and examples.
PO4	**Creativity:** Students will be able to • create, perform, or think in different and diverse ways about the same objectsor scenarios, • innovate and perform tasksin a better manner
PO5	**Teamwork / Coordination:** Being able to facilitate a group's cooperative effort and act together as a group or team to achieve a common goal. Work effectively as an individual as well as a member of the team.
PO6	**Digital and technological skills:** The graduates will be able to demonstrate the capability to: • use ICT in a variety of learning and work situations, • access, evaluate, and use a variety of relevant information sources, and use appropriate software for analysis of data.
PO7	**Research-related skills**: The graduates will be able to demonstrate: • a keen sense of observation, inquiry, and capability for asking relevant/ appropriate questions, • the capacity to develop appropriate methodology and tools for data collection
PO8	**Environmental awareness and action:** The graduates should be able to demonstrate the acquisition of and ability to apply the knowledge, skills, attitudes, and values required to take appropriate actions for effective waste management, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development and living
PO9	**Community engagement and service:** The graduateswillbe able to demonstrate the capability to participate in community-engaged services/ activities for promoting the wellbeing of society
PO10	**Career opportunities:** Students after graduation have several career and employment opportunities such as research firms, agriculture industry, health care industry, pharmacy industry, chemical industry, diagnostic laboratories, software companies, banks, higher studies etc.

PROGRAMME SPECIFIC OUTCOMES		
PSO Number	On successful completion of this course, the students will be able to:	**PO Addressed**
PSO1	Understand the importance of animals their diversity and its conservation	**1,3,8,9**
PSO2	Understand health and environmental protection and to solve the pollution problems.	**1,2,4,6**
PSO3	Understand to care Nature	**1,5,7,8**
PSO4	Understand good laboratory practices and safety. Understand experiments in Zoology	**2,10**
PSO5	Understand how animals have evolved, how they function, and the ways in which they interact with their environment	**4,5,6**
PSO6	After completing the course in Zoology they will be able to join in Fisheries ,sericulture ,Virology&acquaculture departments	**3,9,10**

PSO-PO Mapping

PO											
PSO		1	2	3	4	5	6	7	8	9	10
	1	*		*					*	*	
	2	*	*		*		*				
	3	*				*		*	*		
	4		*								*
	5				*	*	*				
	6			*						*	*

SEMESTER-I

Course Code: 20C1308

Course Name: Animal Diversity -Biology of Nonchordates

CO Number	On successful completion of this course, the student will be able to:	PSO Addressed
CO1	Describe general taxonomic rules on animal classification	1,3,56
CO2	Classify Protozoa to Coelenterata with taxonomic keys	1,2,3
CO3	Classify Phylum Platy hemninthes to Annelida phylum using examples from parasitic adaptation and vermin composting	1,2,3,4
CO4	Describe Phylum Arthropoda to Mollusca using examples and importance of insects and Molluscans	1,3.5.6
CO5	Describe Echinodermata to Hemi chordata with suitable examples and larval stages in relation to the phylogens	1

SEMESTER-II

Course Code: 20C2308

Course Name: Animal Diversity-Biology of Chordates

CO Number	On successful completion of this course, the student will be able to:	PSO Addressed
CO1	Describe general taxonomic rules on animal classification of chordates	1,3,4,6
CO2	Classify Protochordata to Mammalia with taxonomic keys	1,3,5,6
CO3	Understand Mammals with specific structural adaptaions	4,5
CO4	Understand the significance of dentition and evolutionary significance	1,5
CO5	Understand the origin and evolutionary relationship of different phyla fromProchordata to mammalia	1,3,5

SEMESTER-III

Course Code:20C3308

Course Name: Cell Biology,Genetics Molecular Biology and Evolution

CO Number	On successful completion of this course, the student will be able to:	PSO Addressed
CO1	To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure	4,5
CO2	Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell	4,5
CO3	To understandthe history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals	3,5
CO4	Acquiring in-depth knowledge on various of aspects of genetics involved in sex determination, human karyotyping and mutations of chromosomes resulting in various disorders	3,5
CO5	Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins.	3,6
CO6	Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the societ	3,6

SEMESTER-IV

Course Code:20C4308A

Course Name: Animal Physiology,Cellular Metabolism and Embryology

CO Number	On successful completion of this course, the student will be able to:	PSO Addressed
CO1	Understand the functions of important animal physiological systems including digestion, cardio-respiratory and renal systems.	1,4
CO2	Understand the muscular system and the neuro-endocrine regulation of animal growth, development and metabolism with a special knowledge of hormonal control of human reproduction.	1,4
CO3	Describe the structure, classification and chemistry of biomolecules and enzymes responsible for sustenance of life in living organisms	1,4,6
CO4	Develop broadunderstanding the basic metabolic activities pertaining to the catabolism and anabolism of various biomolecules	4,6
CO5	Describe the key events in early embryonic development starting from the formation of gametes upto gastrulation and formation of primary germ layers	3,4

Course Code:20C4308B
Course Name: Immunology and Animal Biotechnology

CO Number	On successful completion of this course, the student will be able to:	PSO Addressed
CO1	To get knowledge of the organs of Immune system, types of immunity, cells and organs of immunity	3,4,6
CO2	To describe immunological response as to how it is triggered (antigens) and regulated (antibodies	3,4
CO3	Understand the applications of Biotechnology in the fields of industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering	6
CO4	Get familiar with the tools and techniques of animal biotechnology.	3,6

SEMESTER-V
Long Term Internships

SEMESTER-VI
Course Code:20C53086C
Course Name: Poultary Management-I (Poultry Farming)

CO Number	On successful completion of this course, the student will be able to:	PSO Addressed
CO1	Evaluate the status of Indian Poultry Industry	1,4
CO2	Explain the Scientific Poultry keeping	1,4
CO3	Compare the diversified Poultry practices	4,6
CO4	Inspect the different breeds of chicken	4,6

Course Code:20C53087C
Course Name: Poultary Management-II (PoultryProduction and Management)

CO Number	On successful completion of this course, the student will be able to:	PSO Addressed
CO1	Suggest measure for Health care in Poultry	3,6
CO2	Evaluate the economics of poultry production	3,6
CO3	Elaborate the poultry Breeder flock management	4
CO4	Differentiate the poultry hatchery practices	4,6