GOVERNMENT DEGREE COLLEGE -MANDAPETA

DEPARTMENT OF ZOOLOGY

COURSRE OUTCOMES

Semester: II

Animal Diversity – Biology of Non Chordata

Course Outcomes: By the completion of the course the graduate should able to –

- Describe general taxonomic rules on animal classification
- Classify Protozoa to Coelenterata with taxonomic keys
- Classify Phylum Platyhemninthes to Annelida phylum usingexamples from parasitic adaptationand vermin composting
- Describe Phylum Arthropoda to Mollusca using examples andimportance of insects andMolluscans
- Describe Echinodermata to Hemichordate with suitable examples andlarval stages in relation to thephylogeny

	Semester: II	
	Animal Diversity – Biology of Chordates	

Course Outcomes: By the completion of the course the graduate should able to -

- Describe general taxonomic rules on animal classification of chordates
- Classify Protochordata to Mammalian with taxonomic keys
- Understand Mammals with specific structural adaptations
- Understand the significance of dentition and evolutionary significance
- Understand the origin and evolutionary relationship of different phyla from Prochordata tomammalian.

	Semester: III	
	Cell Biology, Genetics, Molecular Biology and Evolution	

Course Outcomes:

The overall course outcome is that the student shall develop deeper understanding of what life is and how it functions at cellular level. This course will provide students with a deep knowledge in Cell Biology, Animal Biotechnology and Evolution and by the completionof the course the graduate shall able to–

- To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure.
- Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell.
- To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals
- Acquiring in-depth knowledge on various of aspects of genetics involved in sex determination, human karyo typing and mutations of chromosomes

resulting in various disorder.

- Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins.
- 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 society.

	Semester: IV	
	Animal Physiology, Cellular Metabolism and **Embryology**	

Course Outcomes:

This course will provide students with a deep knowledge in Physiology, Cellular metabolism andMolecular Biology and by the completion of the course the graduate shall able to –

- Understand the functions of important animal physiological systems including digestion, cardio-respiratory and renal systems.
- Understand the muscular system and the neuro-endocrine regulation of animal growth, development andmetabolism with a special knowledge of hormonal control of human reproduction.
- Describe the structure, classification and chemistry of Biomolecules and enzymes responsible forsustenance of life in living organisms
- Develop broad understanding the basic metabolic activities pertaining to the catabolism and anabolismof various Biomolecules
- Describe the key events in early embryonic development starting from the formation of gametes uptogastrula ion and formation of primary germ layers.

	Semester: IV	
	Immunology and Animal Biotechnology	

Course Outcomes:

embryology and ecologyand by the completion of the course the graduate shall able to –

- To get knowledge of the organs of Immune system, types of immunity, cells and organs ofimmunity.
- To describe immunological response as to how it is triggered (antigens) and regulated(antibodies)
- Understand the applications of Biotechnology in the fields of industry and agriculture includinganimal cell/tissue culture, stem cell technology and genetic engineering.
- Get familiar with the tools and techniques of animal biotechnology.

This course will provide students with a deep knowledge in immunology, genetics,

	Semester: V(Skill Enhancement Course - Elective)	
	Sustainable Aquaculture Management	

Course Outcomes:

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Students at the successful completion of this course will be able to

- Evaluate the present status of aquaculture at the Global level and National level
- Classify different types of ponds used in aquaculture

- Demonstrate induced breeding of carps
- Acquire critical knowledge on commercial importance of shrimps
- Identify fin and shell fish diseases

	Semester: V(Skill Enhancement Course - Elective)	
	Postharvest Technology of Fish and Fisheries	

Course Outcomes:

Students at the successful completion of this course will be able to

- Identify the types of preservation methods employed in aquaculture
- Choose the suitable Processing methods in aquaculture
- Maintain the standard quality control protocols laid down in aqua industry
- Identify the best Seafood quality assurance system

	Semester: V(Skill Enhancement Course - Elective)	
	Live Stock Management-I (Biology of Dairy Animals)	

Course Outcomes:

Students at the successful completion of the course will be able to

- Select the suitable breeds of livestock for rearing
- Relate the anatomy of udder with letdown of milk
- Identify and manipulate the reproductive behavior of cattle
- Inspect the economics of dairy farming
- Apprise the various breeding techniques employed in live stock

	Semester: V(Skill Enhancement Course - Elective)	
	Poultry Management- I (Poultry Farming)	

Course Outcomes:

Students at the successful completion of the course will be able to

- Evaluate the status of Indian Poultry Industry
- Explain the Scientific Poultry keeping
- Compare the diversified Poultry practices
- Inspect the different breeds of chicken

	Semester: V(Skill Enhancement Course - Elective)	
	Seri Culture -I***	

Course Outcomes:

Students at the successful completion of this course will be able to

- Evaluate the general status of Sericulture in India
- Understand the development of sericulture Botany
- Evaluate the use of Silk worm breeds

- Differentiate among various silkworm breeds
- Apprise the economics of silk rearing