

CBCS/Semester System (w.e.f.2020-21 Admitted batch)

1 SEMESTER / Zoology Core

Course -1 ANIMAL DIVERSITY NON-CHORDATES

Course Outcomes (Theory)

On successful completion of this course, the students will able to

CO 1: Know about the general characters and classification up to orders from phylum protozoa to hemichordate

CO 2: Gain knowledge about some of the important and common protozoans, helminthes, arthropods of parasitic in nature

CO 3: Understand about the morphology of earth worms and economic importance of vermin compost

CO 4: Understand about pearl formation in pelecypoda, water vascular system in star fish

CO 5: Identify the various invertebrate larval forms

Course Outcomes (Practical)

On successful completion of the practical course, students shall be able to:

CO 1: To understand the importance of preservation of different non -chordate species

CO 2: To identify the animals based on the special identifying characters

CO 3: To understand the different organs system through demo or virtual dissections

CO 4: To maintain a neat labeled record of the identified preserved species




PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA

CBCS/Semester System (w.e.f.2020-21 Admitted batch)
II SEMESTER / Zoology Core

Course -2 ANIMAL DIVERSITY CHORDATES

Course Outcomes (Theory)

On successful completion of this course, the students will be able to

- CO 1:** Know about distinct features and distribution of chordates, origin of chordates
- CO 2:** Know about general characters and classification of Protochordates, Cyclostomes, Fishes, Amphibia, Reptilia, Aves, and Mammals
- CO 3:** Structure and life history of Herdmania (Retrospective Metamorphosis)
- CO 4:** Gain knowledge about the types of scales in fishes, Migration of fishes, Flight adaptations in birds.
- CO 5:** Acquire knowledge on the dentition in mammals

Course Outcomes (Practical)

On successful completion of the practical course, students shall be able to:

- CO 1:** To understand the importance and other methods of preservation of chordates
- CO 2:** To identify chordate species based on special identifying characters
- CO 3:** To understand the internal anatomy of animals through demo or virtual dissections
- CO 4:** To maintain neat, labeled record of identified preserved specimens




PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA

CBCS/Semester System (w.e.f.2020-21 Admitted batch)
III SEMESTER / Zoology Core

Course -3 CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY & EVOLUTION

Course Outcomes (Theory)

CO 1: To understand the basic unit of living organisms and to differentiate the organisms by their cell structure

CO 2: Know about the structure and function of plasma membrane and different cell organelles.

CO 3: To understand the branch of heredity, interaction of genes, sex determination

CO 4: Acquiring knowledge on the central dogma of molecular biology & flow of genetics information from DNA to proteins

CO 5: Know about the principles & forces of evolution of life on earth ,process of evolution of new species.

Course Outcomes (Practical)

On successful completion of the practical course, students shall be able to:

CO 1: Able to prepare temporary slides of mitosis

CO 2: Able to solve genetics problems

CO 3: To understand about the study of human karyotyping

CO 4: Able to identify the fossil evidences, Darwin finches




PRINCIPAL
SPACES DEGREE COLLEGE
PAYAKARAOPETA

**CBCS/Semester System (w.e.f.2020-21 Admitted batch)
IV SEMESTER / Zoology Core**

Course -4 ANIMAL PHYSIOLOGY, CELLULAR METABOLISM & EMBRYOLOGY

Course Outcomes (Theory)

CO 1: Understand the functions and important animal physiological system including digestion, cardio-respiratory and renal system.

CO 2: Understand the muscular system & the neuro - endocrine regulation of animal growth, development & metabolism with a specific knowledge

CO 3: To understand the chemicals of bio molecular & enzymes

CO 4: Develop broad understanding the basic metabolism activities, anabolism & catabolism of biomolecules

CO 5: Describe the key events in early embryonic development starting from the formation of foetal membranes

Course Outcomes (Practical)

CO 1: Gain knowledge animal physiology by qualitative tests

CO 2: Differential count of human blood

CO 3: Gain knowledge on cellular metabolism

CO 4: Acquire knowledge on slides observation on testes, ovary of mammal




PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA

**CBCS/Semester System (w.e.f.2020-21 Admitted batch)
V SEMESTER / Zoology Core**

Course 5 - IMMUNOLOGY AND ANIMAL BIOTECHNOLOGY

Course Outcomes (Theory)

- CO 1:** To get knowledge of the organs of immune system, types of immunity ,cells and organs of immunity
- CO 2:** To describe immunological response as how its triggered and regulated antibodies
- CO 3:** To understand the applications of biotechnology in the fields of industry and agriculture including animal cell/tissues
- CO 4:** Know about the culture, stem cell technology & genetic engineering.
- CO 5:** Get familiar with the tools & techniques of animal biotechnology

Course Outcomes (Practical)

- CO 1:** Acquire skills on demonstration of lymphoid organs & observing histological slides of spleen, thymus & lymph nodes.
- CO 2:** Know about blood groups, ELISA& immune electrophoresis by demonstration method
- CO 3:** Learn about the use of autoclave & importance of sterilization
- CO 4:** Acquire skills for handling equipments for biotechnology practicals
- CO 5:** Know about blotting techniques & DNA fingerprinting




PRINCIPAL
SPACES DEGREE COLLEGE,
PAYAKARAOPETA