



**P.P.N. (P.G.) College, Kanpur**  
96@12 Mahatma Gandhi Marg, Kanpur -208001  
•Telefax: (0512)2361924 • Website: www.ppncollege.org•  
•email:ppncollegekanpur@gmail.com•

Date: 02/05/2023

**UG ZOOLOGY**

**COURSE OUTCOMES (COs)**

**Certificate Course in Medical Diagnostics & Public Health**

**FIRST YEAR SEMISTER-I**

**Course Title:** Cytology, Genetics, Infectious disease CODE: B050101T

**THEORY** CREDITS: 04

CO1 - The students at the completion of Course will be able to understand structure and function of cell organelles.

CO2 – They will also have clear concept of principle of genetics, genes , Chromosomal aberrations and pedigree analysis.

**Course Title:** Cell Biology and Cytogenetics lab. CODE: B050102P

**PRACTICAL** CREDIT:02

CO1 - At the completion of the course students will learn Hands-on to use various microscopes.

CO2 – They will be able to prepare slide, carry pedigree analysis, blood group test.

**FIRST YEAR SEMISTER-II**

**Course Title:** Biochemistry and Physiology. CODE: B050201T

**THEORY** CREDITS: 04

CO1 - Students will learn structure of biomolecules, enzyme catalyzed reactions, energy production.

CO2 - They will also understand physiological processes in animals and human.



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**Course Title:** Physiological, Biochemical & Hematology lab.

CODE:B050202P

PRACTICAL

CREDITS: 02

CO1 - The student at completion of the course will be able to test qualitatively the presence of protein, lipid and carbohydrates and ketones.

CO2 – They can perform basic hematological laboratory testing, diagnosis of hematological disorders and diseases.

#### COURSE OUTCOMES (COs)

### Diploma in Molecular Diagnostics and Genetic Counselling

#### SECOND YEAR SEMESTER-III

**Course Title:** Molecular Biology, Bioinstrumentation and Bio techniques. CODE: B050301T

THEORY

CREDITS: 04

CO1 -The student at completion of the Course will be able to understand DNA, transcription, translation, gene expression, regulation of genes.

CO2 –They will also have clear understanding of various biochemical and molecular techniques.

**Course Title:** Bioinstrumentation and Molecular Biology Lab

CODE: B050302P

PRACTICAL

CREDITS: 02

CO1 - The students at the completion of the Course will understand working of different types of microscopes.

CO2 –They will also learn basic techniques of centrifugation, chromatography, spectrophotometer.



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**SECOND YEAR SEMESTER- IV**

**Course Title:** Gene Technology, Immunology and Computational Biology. CODE: B050401T

THEORY

CREDITS: 04

CO1 - The student at the completion of the Course will be able to understand principle of genetic engineering, application of biotechnology.

CO2 – They will have clear concept of immune system and use of bioinformatics tools.

**Course title:** Genetic Engineering and Counseling lab

CODE: B050402P

PRACTICAL

CREDITS: 02

CO1 - The student at the completion of the course will be able to detect mutation, learn genetic engineering.

CO2 – They will learn use of bioinformatics, genetic counselling.

**COURSE OUTCOMES (COs)**

**DEGREE IN BACHELOR OF SCIENCE**

**THIRD YEAR SEMESTER-V**

**Course Title:** Diversity of Non-Chordates and Economic Zoology

CODE: B050501T

THEORY

CREDITS: 04

CO1 - The student at the completion of the course will be able to identify Non-Chordates, structural and functional diversity of non-chordates.

CO2 –They can get employment in applied sector such as apiculture, sericulture, pisciculture etc.



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**Course Title:** Diversity of Chordates and Comparative Anatomy. **CODE:** B050502T

**THEORY** **CREDITS:** 04

CO1 - After completion of the course students will be able to identify chordates, structural and functional diversity of chordates.

CO2 - Students will also understand evolutionary relationships among chordates.

**Course Title:** Lab on Virtual Dissection, Anatomy, **CODE:** B050503P

Economic Zoology and Parasitology.

**PRACTICAL** **CREDITS:** 02

CO1 - The student at the completion of the Course will be able to identify chordates and Non-Chordates.

CO2 -They can be able to explain structural and functional diversity of chordates and Non-Chordates and evolutionary relationship among them.

CO3- Generate self-employment.

## THIRD YEAR SEMESTER-VI

**Course Title:** Evolutionary and Developmental Biology **CODE:** B050601T

**THEORY** **CREDITS:** 04

CO1- Students will know the organisms of inhabited the earth were different in the past.

CO2- They will understand the different theories of evolution and how animals evolved.

CO3- They will understand how an organism develops from a single cell.



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**Course Title:** Ecology, Ethology, Environmental Science and Wild Life      **CODE:** B050602T

**THEORY**

**CREDITS:** 04

CO1- They will have the knowledge of structure and organization of ecosystem.

CO2- They will understand the various environmental issues and problems and their solutions.

CO3- Students will know behavior of animals.

CO4- They will understand the necessity of conservation of wildlife.

**Course Title:** Lab on Ecology, Environmental Science, Behavioral

**CODE:** B050603P

Ecology and Wildlife

**PRACTICAL**

**CREDITS:** 02

CO1- Student will be able to understand interactions between organisms and environment.

CO2- They can get employment in zoos, sanctuaries etc.

CO3- They can go for research in wildlife.

**HOD**  
Dept. of Zoology

**Convener**  
NAAC

**Convener**  
IQAC

**Principal**  
PPN PG College  
PT. PRITHI NATH (P.G.) COLLEGE  
KANPUR