**K.T.S.P. Mandal’s**

**Hutatma Rajguru Mahavidyalaya Rajgurunagar**

**Program Specific Outcome &Course Outcome**

**Department of Zoology**

**Academic Year 2021-2022**

**T. Y. B.Sc.**

* Distinguish positive and negative impacts of pesticide use.
* Understand problems resulting from misuse, overuse, and abuse of chemical pesticides.
* Define and describe pesticide resistance and how it develops.
* Identify ecological and biological characteristics important in development of pest populations.
* Identify 10 tactics commonly used in IPM and be able to distinguish them.
* Understand society’s role in IPM decisions.
* The students will be able to understand, classify and identify the different types of tissue.
* The students will understand the complexity of various tissues in an organ.
* The students will be able to learn structure & functions of various tissues.
* The students will understand the various diseases related to organs.
* The students will learn about the chemical structures of carbohydrate, and their biological and clinical significance.
* The students will be able to understand, interpret structure and importance of proteins, carbohydrates and lipids
* Learners will be able to comprehend variations in enzyme activity and kinetics. The students will be able to learn about the morphology, life cycle, pathogenicity and treatment of common parasites (Protists and Platyhelminthes).
* The students will be able to learn about host -parasite relationships and their effects on host body.
* The students will be able to learn about the arthropod parasites and their role as vector.
* The students will be able to understand the Poultry farming practices.
* The students will able to understand the poultry breeding techniques.
* The students will be able to understand poultry rearing techniques.
* The students will be able to understand feeding requirement and food ingredients.
* The students will be able to understand the poultry disease and their pathogens. 6. The students will be able to understand market value of poultry products.
* The students will be able to understand the basics principles of Medical and Forensic Zoology.
* The students will able to understand scientific methods in crime detection.
* The students will be able to understand the advancements in the field of Medical and Forensic Zoology.
* The students will be able to understand modern tools, techniques and skills in forensic investigations.
* The students will be able to describe the fundamental principles and functions of forensic science and its significance to human society.
* Understand Concept of energy requirements
* Various aspects of Digestive physiology.
* Circulatory system with medical conditions
* Understand Respiratory mechanism and gases transport.
* Eliminations of waste materials from the body.
* Develop understanding in Structure and functions of muscles
* Understand formation of gametes and function of endocrine glands.
* Learner shall get an insight into molecular mechanisms of various biological processes in cells and organisms
* Learner shall get an insight into the Structure of DNA and RNA, DNA and RNA as genetic material
* The course shall prepare learner to get insight into the Central Dogma of Molecular Biology
* Learn morphology and anatomy of Insects.
* Understand the concept of social organization in Insects.
* Understand the development process of Insects.
* Identify disease causing insect vectors.
* Will be able to design and implement pest controlling methods against pests. Apply evolutionary theory and concepts to address empirical and theoretical questions in evolutionary biology.
* Independently investigate evolutionary questions using literature and analyses of empirical data.
* Communicate the principles, theories, problems and research results associated with questions that lie within the evolutionary framework to students
* Students should be encouraged to take up laboratory work, hands-on practical investigation and design experimental setup.
* Field work to be carried out under proper supervision and permissions from the concerned authorities.