Economic Zoology By Shukla

1. Parasitic Protozoa and Human Diseases 2. Phytoparasitic Nematodes and their Control 3. Zooparasitic Helminths and their Control 4. Mites and Ticks and their Control 5. House Hold Insects 6. Insect Pests of Some Crops of Economic Importance 7. Insect Pest Management 8. Apiculture 188-201 9. Lac Culture 202-211 10. Sericulture 212-233 11. Prawn Fishery 234-246 12. Pearl Culture 247-253 13. Edible Freshwater Fishes 14. Fish Culture 15. By-products of Fishing Industry 16. Snakes and Snake Venom 17. Poultry 18. Economic Importance of Mammals 19. Piggery 20. Dairy Industry 21. Leather Industry 22. Wool Industry 23. Fur and Fur Industry 24. Pharmaceuticals from Animals 25. Rats and Their Control 26. Wild Life in India and its Conservation 27. AIDS

This book aims to provide up-to-date information's on economic aspects of insects, because they are always considered as harmful by mankind. But it is quite interesting to note that there are various insects which are of economic importance and they provide useful product. This book covers selected subjects/topics which are useful for students, researchers and for those working on various aspects of economic entomology.

Aquaculture, farming of aquatic animals and plants, is one of the world’s fastest growing food production systems. This text provides an excellent elucidation of the concepts of aquaculture along with its impact on the environment. Written in a style that makes the subject both interesting to read and easy to understand, this text describes the scope and principles of aquaculture, and the design and management of a typical aquaculture/fish farming. It explains different types of culture systems and practices, as well as different criteria for the selection of species for culture. The text discusses some common diseases in aquaculture and measures to prevent them. It further elaborates the importance of a balanced diet for aquatic species and focuses on harvesting and post-harvesting technology. Biotechnolgy has gained immense importance in recent years and it is now applied to aquaculture for improvement of aquatic species. This book discusses in detail the role of biotechnology in aquaculture. In addition, it deals with different aquaculture practices in India, such as culture of carp, prawn, pearl and seaweed. The text concludes with a discussion on the effects of aquaculture practices on the environment. Key Features Provides a list of major important aquaculture species cultured worldwide. Presents the latest data to enhance the utility of the text. Gives special emphasis on aquaculture practices in India. The book is intended for undergraduate and postgraduate students of zoology (B.Sc. and M.Sc.) and fisheries (B.F.Sc. and M.F.Sc.). It will also be useful to aquaculturists and environmentalists.

Product Dimensions: 21x15x3 cm. 10 edition. Contents:

CONTENTS:1.Introduction 2.Cellular Basis of Development 3.DNA, RNA and Protein Synthesis 4.Male Gonads and Spermatogenesis 5. Female Gonadsand Oogenesis 6.Semination, Ovulation and Transportation of Gametes

7.Reproductive Cycles . Fertilization 8 Parthenogemsis 9 Cleava and Blastulation - Nucleus and Cytoplasm in Development 10 Fate Maps and Cell Lineage, Gastrulation , Neurulation, Morphgenesis and Growth 11 Embryogenesis of a Simple Ascidian - Embryogenesis of Amphioxus 12 Embryogenesis of Frog 13. Detailed Account of Organogenesis of Frog lEmbryogenesis of Chick.14 Early Embryogenesis of Eutherian Mammal 15 Rabbit Placenta and Placentation 16 Gradient Theory lEmbryonic Inductions and Competence 17 Differentiation Asexual Reproduction and Blastogenesis 18 Regeneration 19 Metamorphosis 20Teratogenesis 21 Birth Control 22 Impotency, Sterility, Artificial Insemination, Test-tube Baby and GIFT, Giossary 23 Selected Reading 24 Index.

1. Introduction to the Study of Animal Behaviour 2. Concepts of Ethology 3. Methods of Studying Behaviour 4. Mammalian Nervous System and Behaviour 5. Pheromones 86-108 6. Hormones and Behaviour 7. Biological Clocks 8. Orientation 9. Bird Migration and Navigation 10. Fish Migration 11. Social Organization 12. Wildlife 10 India Glossary Supplementary Reading

Microbial Biodegradation and Bioremediation brings together experts in relevant fields to describe the successful application of microbes and their derivatives for bioremediation of potentially toxic and relatively novel compounds. This single-source reference encompasses all categories of pollutants and their applications in a convenient, comprehensive package. Our natural biodiversity and environment is in danger due to the release of continuously emerging potential pollutants by anthropogenic activities. Though many attempts have been made to eradicate and remediate these noxious elements, every day thousands of xenobiotics of relatively new entities emerge, thus worsening the situation. Primitive microorganisms are highly adaptable to toxic environments, and can reduce the load of toxic elements by their successful transformation and remediation. Describes many novel approaches of microbial bioremediation including genetic engineering, metagenomics, microbial fuel cell technology, biosurfactants and biofilm-based bioremediation Introduces relatively new hazardous elements and their bioremediation practices including oil spills, military waste water, greenhouse gases, polythene wastes, and more Provides the most advanced techniques in the field of bioremediation, including insilico approach, microbes as pollution indicators, use of bioreactors, techniques of pollution monitoring, and more

The book provides discussion on all aspects of Invertebrates as covered in Practical Zoology. Beginning with general techniques of preparation of cultures of Protozoa, microscopic slides and laboratory regents, it also covers in tabular and detailed form, recent classification of various invertebrate phyla with examples of each order or suborder. Wide coverage of each phylum, and diagrams of major and minor dissections make the book equally useful for both undergraduate and postgraduate students.

Parasiticide Discovery: In Vitro and In Vivo Tests with Relevant Parasite Rearing and Host Infection/Infestation Methods, Volume One presents valuable screening

methods that have led to the discovery of the majority of parasiticides commercialized in the animal health industry. As much of the knowledge of parasiticide discovery methods is being lost in the animal health industry as seasoned parasitologists retire, this book serves to preserve valuable methods that have led to the discovery of the majority of parasiticides commercialized in animal health, also giving insights into the in vitro and in vivo methods used to identify the parasiticide activity of compounds. Addresses current issues of resistance, along with combination uses for resistant parasites Presents useful, authoritative information (chemical, pharmaceutical, clinical, etc.) for the pyrantel family of compounds Includes a discussion on screening methods in combination therapies Provides cutting-edge material for an evolving area of scientific discussion Includes in vitro and in vivo screens and parasite maintenance and culture methods

1. Introduction 2. Climatic and Topographic Factors 3. Edaphic Factors (Soil Science)4. Biotic Factor 5. Ecological Adaptations 6. Autecology of Species 7. Population - Structure and Dynamics 8. Community-Structure and Classification 9. Community Dynamics (Ecological Succession)10. Ecosystem: Structure and Function 11. Habitat Ecology 12. Degradation of Natural Resources andthe Environmental Problems 13. Energy Crisis and Non-Conventional Sources 14. Biodiversity and Wildlife of India and its Conservation 15. Environment and Development-India's Viewpoint16. Global Warming and Climate Change 17.

1. Economically Important Phytoparasitic Nematodes 2. Insect Pests of Some Economically Important Crops 3. Some Important Parasites and Pests 4. House Hold Insects 5. Mites and Ticks 6. Apiculture 7. Lac Culture 8. Sericulture 9. Edible Fresh Water Fishes 10. Fish Culture 11. Economic Importance of Fish 12. Fish Diseases 13. Poultry 14. Dairy Farming 15. Rat Menace and Its Control BIOSTATISTICS 1. An Introduction to Biostatistics 2. Graphic Representation of Frequency Distribution 3. Measures of Central Tendency 4. Measures of Validity 5. Normal Distribution Log/ Antilog Tables ANIMAL BEHAVIOUR 1. Introduction and Significance of Study of Animal Behaviour 2. Concepts and Patterns 3. Approach and Methods 4. Communication 5. Reproductive Behaviour in Animals: Courtship and Mating 6. Aggressive and Territorial Behaviour 7. Parental Behaviour 8. Behavioural Genetics

CELL BIOLOGY1. The Cell 2. Microscopy 3. Protoplasm 4. Cell Membrane 5. Mitochondrion 6. Golgi Complex7. Endoplasmic Reticulum 8. Ribosomes9. Lysosomes10. Centrosome 11. Plastids 12. Cilia, Flagella and Basal Bodies 13. Nucleus 14. Chromosomes 15. Nucleic Acids 16. Cell Reproduction : Mitosis 17. Cell Reproduction : Meiosis 18. Biology of Cancer 19. Cellular Basis of Immunity DEVELOPMENTAL BIOLOGY1. Historical Perspective, Aims and Scope ofDevelopmental Biology2. Gametogenesis3. Fertilization4. Types of Patterns of Cleavage5. Blastulation and Fate Maps in Frog and Chick6. Gastrulation in Frog.

Contents: Introduction, Vermiculture, Apiculture, Sericulture, Lac Insect and Lac Culture, Agricultural Pests and their Control.

Papers presented at the 23rd All India Congress of Zoology and National Conference on the theme "Conservation and Management of Faunal Resources for Sustainability", held at Guru Nanak College during 3-5 October 2012.

For B.Sc. and B.Sc(hons.) students of all Indian Universities & Also as per UGC Model Curriculum. The multicoloured figures and arrestingly natural photographs effectively complement the standard text matter. The target readers shall highly benefit by correlating the content with the muliticoloured figures and photographs The book has been further upgraded with addition of important questions: long, short, very short and multiple questions in all chapters. A complete comprehensive source for the subject matter of various university examinations.

This book is a compilation of writings focused on conventional and unconventional insect products. Some of these products are commercials successes, while others are waiting to be launched and are the potential produce of the future. In addition to the well known products honey, mulberry silk, and lac, the book primarily concentrates on silk producing insects other than the mulberry silkworm, insects as food, as sources of medicines, pest and weed managers, and as pollinators. The book highlights the all pervasive role of insects in improving human lives at multiple levels. Accordingly, while most books on insects concentrate on how to limit growth in their population, it instead focuses on how to propagate them. In each chapter, the book brings to the fore how insects are far more beneficial to us than their well publicised harmful roles. This book approaches both unconventional and conventional insect products, such as honey, silk and lac in much more depth than the available literature. It investigates different aspects of the production of these insects, such as the related processes, problems and utilities, in dedicated chapters. Because this book deals with the production of insects or their produce, it has been named Industrial Entomology, perhaps the only book that truly reveals the tremendous potential of insects to help humans live better lives. Based on the research and working experience of the contributors, who are global experts in their respective fields, it provides authentic, authoritative and updated information on these topics. The book offers a unique guide for students, teachers, policy planners, small scale industrialists, and government ministries of agriculture and industry across the globe. It will provide a much required stimulus to insect appreciation and generate enthusiasm for research and the broader acceptance for insect produce. Hopefully, it will also present the Indian perspective on these topics to a global readership.

When animals communicate with one another, they follow a certain pattern of behavior. The scientific study of the characteristic behavior patterns and the study of Animal behavior and social organization from a biological perspective are known as the Ethology, i.e., Ethology (ethos = habit, and logos = study, deals with the study of animal behavior) is the special branch of biology that analyzes the reaction of an animal to its environment, trying to determine specific cause and effect relationship between the animal action and events and condition experienced by the Animals.

Recently Applied and Economic Zoology has been included in national syllabus by UGC for undergraduates. The book examines insect pests, animal pests, natural enemies, beneficial insects, beneficial animals, agricultural chemicals and more. The current book is blueprint for undergraduate students to aware about our natural wild life and its economic importance. The book contains four

chapters with illustrations and boxed materials. In the chapter 1, we have covered parasitology, in which we have deliberately discussed about parasites of domestic animals and human, structures, life cycles, pathogenicity, diseases, symptoms and it control. In chapter 2, we consciously talk about vectors and pests. Here, we covered life cycle and control of pest and vectors such as Gundhi bug, Sugarcane leafhopper, Rodents, Termites and Mosquitoes. Chapter 3 is about animal breeding and animal cultures. In this, we stared with basic introduction about breeding and culture, difference between them and then detailed discussion about Animals and Human Society, Animal Breeding, Genetic engineering applications in Animal Breeding, Breeding and Variation, Aquaculture, Pisciculture, Poultry farming, Sericulture, Apiculture, Lac-culture. The last chapter has wild life of India. In this chapter we provided detail for Wild Life Protection and Acts, Documentation of Wild Life, Rare, Endangered and Endemic species, Protected Area Network, Conservation of Wild Life, In-situ and Ex-situ conservation.