

Kotpal Vertebrate Zoology

For B.Sc., B.Sc.(Hons.) and M.Sc. Classes of All Indian Universities

"Animal Diversity is tailored for the restrictive requirements of a one-semester or one-quarter course in zoology, and is appropriate for both nonscience and science majors of varying backgrounds. This Ninth edition of Animal Diversity presents a survey of the animal kingdom with emphasis on diversity, evolutionary relationships, functional adaptations, and environmental interactions"--

"Comparative Anatomy of Vertebrates is written bearing in mind that the modern trends of studies on the chordates have changed drastically from the classical study of one or two commonly available representative types to a detailed comparative account of organs and organ systems present in all available extant forms." "The book provides an introduction to structure-function concept at the level of organs and organ systems, which is fundamental to the understanding of synthesis of comparative anatomy. The book is divided into twelve chapters. The first chapter deals with characteristics of chordates, followed by integumentary system, skeletal system, muscular system, digestive system, respiratory system, circulatory system, excretory system, reproductive system, nervous system, receptor system and lastly endocrine system."--BOOK JACKET.

FOR B.Sc & B.Sc.(Hons) CLASSES OF ALL INDIAN UNIVERSITIES AND ALSO AS PER UGC MODEL CURRICULUM Contents:

CONTENTS:Protochordates:Hemichordata 1.Urochordata Cephalochordata Vertebrates : Cyclostomata 3. Agnatha, Pisces Amphibia 4. Reptilia 5. Aves Mammalia 7 Comparative Anatomy:Integumentary System 8 Skeletal System Coelom

and Digestive System 10 Respiratory System 11. Circulatory System Nervous System 13. Receptor Organs 14 Endocrine System 15 Urinogenital System 16 Embryology Some Comparative Charts of Protochordates 17 Some Comparative Charts of Vertebrate Animal Types 18 Index.

Tulip Hill is an obedient and intelligent daughter to her disciplinarian parents. She has been a topper throughout her school, because her parents wanted her to be. Now, they want her to enroll in one of the best colleges. But Tulip harbors the desire to become a singer, for music is her only passion that helps her see through life's miseries. Then there is Sam - witty, easy-going and flirty. Both Tulip and Sam share their love for music. Yet, both dream of a different life. What are those dreams? What happens when they meet and enter the biggest duet competition together? Will their love blossom during this emotional roller-coaster? Join the VoiceMates in their musical journey to know more! Anamika Mishra is an Indian author and blogger. Her debut novel *Too Hard to Handle* was an instant hit. She is also a motivational speaker and has given guest lectures in reputed organizations and institutions. She has a degree in BCA followed by MJMC from Amity University. You can follow Anamika on (www.anamikamishra.com), (www.facebook.com/anamikamishra.page), Twitter (@anamikawrites) or Email her at mail@anamikamishra.com

The revised edition as per UGC model for B.Sc. (Pass & Honours) and M.Sc. students of all Indian Universities and also useful for competitive examinations like NET, GATE, etc. New chapters added on 'Human Immunodeficiency virus and AIDS', 'Ecological Groups of Microorganisms', 'Extremophiles Aeromicrobiology', 'Biogeochemical Cycling' and 'Pharmaceutical and Microbial Technology' besides many illustrations. The text has been made more informative. The special features include development of microbiology in the field has been provided, microbiology applications, the concept of microbiology, bacterial nomenclature, modern trends in between, etc

Unit I : Animal Diversity-I (Non Chordate :Lower & Higher) Part A : Lower Non-Chordates (Invertebrates) Part B: Higher Non-Chordate Unit-ii : Cell Biology & Biochemistry Unit-iii : Genetics

This book is a concise study of the structure and function of vertebrate respiratory systems. It describes not only the individual organ systems, but also the relationship of these systems to each other and to the animal's environment. For example, the author emphasizes that a proper understanding of respiration involves a consideration of the external environment as a source of oxygen as well as the biochemistry of the cell; and, from the evolutionary point of view, that physiological changes in the respiratory and circulatory systems are dominated by

the origin of the land habit. The author's approach to the subject exemplifies that trend to the amalgamation of Zoology and Physiology, which has become increasingly marked at universities and schools in recent years. This synthesis requires, broadly, a knowledge of classical comparative anatomy, ecology, evolution, physiology and biochemistry; an enormous task, but nevertheless one in which the zoologist holds a central position. This book indicates the nature of such an eclectic approach, with the animal, in its environment and its evolution, as its focal point. Covering a rapidly changing field of research the author refers to many recent views and indicates where these differ from those commonly accepted.

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.

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 and the 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.

The revised edition of this bestselling textbook provides latest and detailed account of vital topics in biology, namely, Cell Biology, Genetics, Molecular Biology, Evolution and Ecology . The treatment is very exhaustive as the book devotes exclusive parts to each topic, yet in a simple, lucid and concise manner. Simplified and well labelled diagrams and pictures make the subject interesting and easy to understand. It is developed for students of B.Sc. Pass and Honours courses, primarily. However, it is equally useful for students of M.Sc. Zoology, Botany and Biosciences. Aspirants of medical entrance and civil services examinations would also find the book extremely useful.

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 Gonads and Oogenesis 6.Semination, Ovulation and Transportation of Gametes 7.Reproductive Cycles . Fertilization 8 Parthenogenesis 9 Cleavage and Blastulation - Nucleus and Cytoplasm in Development 10 Fate Maps and Cell Lineage, Gastrulation , Neurulation, Morphogenesis and Growth 11 Embryogenesis of a Simple Ascidian - Embryogenesis of Amphioxus 12 Embryogenesis of Frog

13. Detailed Account of Organogenesis of Frog
Embryogenesis of Chick. 14 Early Embryogenesis of
Eutherian Mammal 15 Rabbit Placenta and Placentation
16 Gradient Theory Embryonic Inductions and
Competence 17 Differentiation Asexual Reproduction
and Blastogenesis 18 Regeneration 19 Metamorphosis
20 Teratogenesis 21 Birth Control 22 Impotency, Sterility,
Artificial Insemination, Test-tube Baby and GIFT,
Glossary 23 Selected Reading 24 Index.

This comprehensive and well known textbook deals with the characteristics, classification and life cycle of different species of fungi. While it provides a detailed account of bacteria, viruses, mycoplasma and lichens, it also discusses elementary plant pathology.

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 multicoloured 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. Courses on the invertebrates have two principal aims: (1) to introduce students to the diversity of animal life and (2) to make them aware that

organisms are marvellously integrated systems with evolutionary pasts and ecological presents. This text is concerned exclusively with the second aim and assumes that the reader will already know something about the diversity and classification of invertebrates. Concepts of whole-organism function, metabolism and adaptation form the core of the subject-matter and this is also considered in an ecological setting. Hence, the approach is multi-disciplinary, drawing from principles normally restricted to comparative morphology and physiology, ecology and evolutionary biology. Invertebrate courses, as with all others in a science curriculum, also have another aim - to make students aware of the general methods of science. And these I take to be associated with the so-called hypothetico deductive programme. Here, therefore, I make a conscious effort to formulate simple, some might say naive, hypotheses and to confront them with quantitative data from the real world. There are, for example, as many graphs in the book as illustrations of animals. My aim, though, has not been to test out the principles of Darwinism, but rather to sharpen our focus on physiological adaptations, given the assumption that Darwinism is approximately correct. Whether or not I succeed remains for the reader to decide.

This CD-ROM provides students in the whole animal Biology courses such as General Zoology,

Invertebrate Zoology and Vertebrate Zoology with an interactive guide to the specimens and materials that they will be studying in their laboratory and lecture sessions. Lab modules are the biggest components of Digital Zoology, and each contain illustrations, photographs and annotations of the major structure of organisms and microscope slides commercially available from the suppliers used by high schools and universities. Lab modules are combined with explanations of the various animal groups and interactive cladograms that allow students to investigate the major evolutionary events that have given rise to the tremendous diversity of animals that we find on the planet.

The majority of undergraduate texts in invertebrate zoology (of which there are many) fall into one of two categories. They either offer a systematic treatment of groups of animals phylum by phylum, or adopt a functional approach to the various anatomical and physiological systems of the better known species. *The Invertebrates* is the first and only textbook to integrate both approaches and thus meet the modern teaching needs of the subject. This is the only invertebrate textbook to integrate systematic and functional approaches. The molecular systematics sections have been completely updated for the new edition. Strong evolutionary theme which reflects the importance of molecular techniques throughout. Distills the essential characteristics of each invertebrate group and lists diagnostic features to allow comparisons between phyla. New phyla have been added for the new edition. Stresses comparisons in physiology, reproduction and development. Improved layout and illustration quality.

Read Online Kotpal Vertebrate Zoology

Second edition has sold 14000 copies. Nature of the first edition: 'Students will like this book. It deserves to succeed.'

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