

NEW FROM LONGMAN

Companion to Biochemistry

A T Bull, J R Lagnado,
J O Thomas and K F Tipton

This book is designed to fill the gap between basic texts and specialist reviews by providing a collection of about twenty articles on various important aspects of biochemistry. Suitable for advanced undergraduate teaching in biochemistry.

£7.00 net

Theory of Linear & Non-Linear Programming

S Vajda

This book gives a logical and consistent exposition of the theory of the subject assuming only a knowledge of linear algebra and of elementary differential calculus. It concentrates on theory rather than on algorithms, and will be found to be an appropriate text for courses on the mathematical theory of decision sciences in both operational research and industrial engineering. Pure mathematicians will also find much interest in this book offering, as it does, many opportunities for the derivation of further results.

£2.95 net

Tropical Forest and its Environment

K A Longman and J Jenik

This is the first book in over 70 years to give a full and dynamic picture of the world's tropical forests from the standpoint of plant ecology and physiology of tree growth. This book analyses the fundamental reasons for the dwindling areas of natural forest. The authors draw attention to the need to study and understand the functioning of these great natural plant communities before they are lost.

£1.95 net



Longman
1724 - 1974

few minor errors, for example the ball-and-socket joint is a characteristic of many placoderms, not just *Dinichthys* (page 22), and the description of the mole's digging musculature (page 146) is decidedly misleading. But errors seem to be reassuringly few in number, and the book can at least be commended as an informative text.

The preface says that the book has been written for students attending a one semester course on vertebrates, and before one can recommend it as such, it must be considered in relation to its rivals, especially Romer's *Vertebrate Body* which I recommend to my students. In this comparison, the Webster's book scores heavily on its functional approach—Romer is by contrast rather dry reading. Romer's book is, not surprisingly, better grounded in palaeontology, and gives a better account of the skeletal systems. The Websters on the other hand, give a better account of the nervous system. In value, however Romer's book is so superior that the comparison is hardly worth making—it contains about 35% more figures, 16% more pages, a much better bibliography, yet costs only 30% of the Webster's book. It is difficult to know quite why this new text should be so expensive, but the 45 mm margins to the text are wasteful and the insert of six unhelpful colour plates seems an extravagance. Romer's use of colour on ordinary text figures is far more satisfactory.

In summary, then, this text is sufficiently different from its rivals to warrant a place in university libraries. On simple economic arguments, it cannot possibly be commended to students.

D. W. YALDEN

Snake bite

Toxicology and Pharmacology of Venoms from Poisonous Snakes. by John H. Brown. Pp. xiv+184. (Thomas: Springfield, September 1973.) \$13.75 cloth; \$9.95 paper.

I FIND little merit in this book. For one thing the production is poor. The reproduction of most of the 84 colour plates is bad, of some very bad and of two upside down. It is claimed to be encyclopaedic but the widespread and dangerous viper, *Echis carinatus*, receives scant mention and none in the chapter on symptomatology and treatment. Snakebite in England is mentioned but not in the subcontinent of India!

I cannot make out to whom the book is addressed. The chapter on pharmacology is in technical language and con-

tains information likely to interest only research workers. The factors which make the distinctions between those known to be dangerous, those only potentially dangerous and harmless snakes are only vaguely indicated. There is a full list of poisonous snakes around the world but not a hint on how to go about identifying a specimen. Those who do not already know snakes will learn little.

The best parts deal with yields and preparation of venom and assessment of toxicity. These seem, however, unlikely to justify the purchase price to many readers.

GARTH UNDERWOOD

Above the atmosphere

Radio Wave Propagation. By Armel Picquenard. Pp. vi+343. (Macmillan: London and Basingstoke, April 1974.) £10.

THIS year is the fiftieth anniversary of the experimental proof of the existence of the ionosphere, so that there is a special interest in the subject of Professor Picquenard's new book. It is refreshing to be able to welcome such a book from a Brazilian author, when there have been so many books on related subjects from more northerly parts of the American continent.

The whole range of subjects in radio propagation is reviewed. The early chapters are concerned with the troposphere, including both stratified media and scatter propagation, and with the Earth's surface, including both smooth and irregular terrain and diffraction by obstacles. The chapter on the ionosphere deals with its formation and temporal variation and discusses propagation mainly for an isotropic plasma.

The object is to show how to assess a given radio communication link. More than one third of the book is devoted to the last chapter entitled "Practical Calculation of Radio Links", but much of this space is occupied by charts and diagrams, for example a series of 24 maps of the world showing how the intensity level of atmospherics varies with frequency and with time of day, through the year.

This book is for the practical communications engineer who wants to know the answers and is prepared to take the theory on trust. It is not for the more serious scientist who wants to understand the theory and apply it to new situations. There are errors in some of the formulae although many of them are only minor. On the whole it is a useful book.

K. G. BUDDEN