Advanced Calculus

By Prof. David V. Widder. (Prentice-Hall Mathematics Series.) Pp. xvi + 432. (New York : Prentice-Hall, Inc. ; London : Constable and Co., Ltd., 1947.) 36s. net.

THE subject-matter contained in this volume is, broadly speaking, that encountered by a student taking an honours course in pure mathematics, and within some four hundred pages the author has succeeded in discussing a wealth of valuable material. Considerable care has been taken with the mode of exposition, particularly as regards the framing of the definitions and the arrangement of the theorems, in each of which the hypothesis, proof and conclusion are elegantly presented.

In addition to the usual topics which feature in books of this kind (such as partial differentiation, infinite series, limiting forms and the various types of classical integral), there are chapters dealing with vector methods, applications of the calculus to differential geometry, Stieltjes integrals, Fourier series, and the Laplace transform. The notation employed, being that now current in the United States, differs quite substantially in many places from that used in Great Britain as do, to a less extent, some of the methods of proof. No serious disadvantage, however, need result from these causes, as any student for whom this book was designed would inevitably possess considerable skill in elementary manipulation and should, in consequence, experience no difficulty in following Prof. Widder's lucid and concise arguments.

Although present-day austerity precludes the use of paper of a quality worthy of such a work, the printing is of a very high standard. A large collection of valuable examples, many of which are worked as illustrations in the text, is also provided.

J. H. PEARCE

Good Health to the Garden

How to Combat the Pests, Diseases and Weeds of Vegetables. Pp. 48. (Yalding: Plant Protection, Ltd., 1946.) 3s. 6d. net.

THIS is an attractive book, well printed, and beautifully illustrated from water colours by Dorothy Fitchew. It deals with the commoner pests, diseases and weeds likely to be encountered among vegetables in the home and allotment garden. The brevity of its text should also appeal to amateur horticulturists, who are often overpowered by a compendious treatment of garden difficulties alone. Eleven pests and the same number of diseases are described, with control methods based on general treatment and 'Plant Protection' products. One short section deals with friends of the garden, while general pests such as wireworms, millepedes, cutworms and leather jackets are also discussed and figured in colour. This is one of several such books projected by Messrs. Plant Protection, Ltd.

Wild Flowers of the Chalk

By John Gilmour. (King Penguin Books, K.37.) Pp. 31 + 16 plates. (Harmondsworth and New York: Penguin Books, Ltd., 1947.) 2s. 6d.

THIS is another of the charming King Penguin series depicting wild flowers according to their habitat. J. S. L. Gilmour, the author, was formerly assistant director at the Royal Botanic Gardens, Kew, and is now director of the Royal Horticultural Society's Gardens. His own special researches have

been mainly ecological, so it can be taken for granted that the text is authoritative and up to date.

Gilmour discusses the origin of the chalk flora, both 'characteristic' and 'non-characteristic', then considers in more detail such chalk habitats as downs, dykes and earthworks, grassy knolls, cliffs and chalk pits, beechwoods, roadsides and hedgerows. Though a few species are comparatively rare, the reader should have little difficulty in finding most of the flowers in their season. It is impossible to rate too highly the sixteen colour plates prepared by Irene Hawkins. No one could fail to identify a plant thus illustrated; but apart from this, each plate is a work of art. This book, small though it is, is one which every field naturalist should possess.

A Handbook of Sociology

By Prof. William F. Ogburn and Prof. Meyer F. Nimkoff. (International Library of Sociology and Social Reconstruction.) Pp. xi+644. (London: Kegan Paul and Co., Ltd., 1947.) 25s. net.

PROFS. OGBURN and Nimkoff's contribution to the well-known International Library of Sociology and Reconstruction maintains the high standard which one has learned to expect from this series and, in many respects, may be rated as the most useful source-book in sociology yet produced. Looking at social life as the interaction of four factors : the biological organism, geographical environment, group processes and cultural heritage, the authors first discuss the principal conclusions of biology, psychology, geography and other disciplines in their relations to sociology, and then proceed to the fundamental facts, basic concepts and theories which form the body of sociology proper. In the latter section the book touches its highest level and, in the chapters on the family and religious institutions, the rational approach to subjects which are usually clothed with emotion and sentiment deserves careful study by all who are seeking to unravel the complexities of the behaviour of individuals in groups.

T. H. HAWKINS

Mammals of Eastern Asia

By G. H. H. Tate. (Pacific World Series.) Pp. xv + 366. (New York: The Macmillan Company; London: Macmillan and Co., Ltd., 1947.) 20s. net.

THE ill wind has blown its proverbial good. Until now there has been no general work on mammals of eastern Asia, and it took the War to produce one: Dr. Tate wrote this book for the benefit of soldiers interested in natural history. The scope of the book is the mammal fauna found from north-eastern Siberia to Singapore, and from the Gobi Desert and Lake Baikal to the western shores of the Pacific. The mammals of the Japanese islands are also included, but not those of the East Indies, which have already been dealt with in a companion volume, "Mammals of the Pacific World", 1944, by Dr. Tate in conjunction with T. D. Carter and the late J. E. Hill.

"Mammals of Eastern Asia" is really an illustrated, descriptive checklist, and with its help the amateur naturalist should be able to identify most mammals occurring in the area. This book, though it sets out to cater for the amateur, will be found invaluable by the professional zoologist, since it contains much information which is only to be found otherwise in scattered papers. T. C. S. M.-S.