

BOOK REVIEWS

J. GUY: Mathématiques préparatoires aux sciences expérimentales. (Mathematics in preparation for experimental sciences). S.E.D.E.S., Paris, 1959. pp. 306., 2,100 French francs, 252 Belgian francs.

THIS book is mainly intended for students of pharmacy, medicine and the sciences, to help their understanding of physics and chemistry, but it is also likely to be extremely useful to research workers wishing to improve their basic knowledge of mathematics.

It contains numerous practical examples, is presented in an essentially graphical manner, and should enable the attentive reader to manipulate the vectorial calculation, ordinary integrals and differential linear equations, even when the basic knowledge of the reader does not go beyond general certificate of education standard.

Z. M. BACQ

Eléments de calcul des probabilités et de calcul statistique. (Basic elements of the theory of probabilities and of statistical calculation). C.D.U., Paris, 1959. pp. 170, 850 French francs, 105 Belgian francs.

THIS booklet should be very useful to all biologists. After a simple but relatively comprehensive study of the principle theorems of the theory of probabilities (probability of causes, theory of deviations, correlation, laws of Gauss and of Poisson, etc.), the author examines the leading ideas of statistical calculation. In particular, the last two chapters concern the techniques of descriptive analysis and various examples of interpretation are fully treated (tests of hypotheses, significant difference and methods of estimation of parameters).

Z. M. BACQ

ANDREW WILSON and H. O. SCHILD: **Applied Pharmacology** (CLARK), 9th Edition. J. and A. Churchill, Ltd., 1959. 750 pp. 50s.

A. J. CLARK wrote the first edition of this book in 1923 to demonstrate the importance of scientific evidence in the clinical application of drugs. It helped to bridge the gap between pharmacology and therapeutics and has been popular with medical students ever since that time. The 7th edition appeared in 1940 and was the last for which CLARK was responsible. ANDREW WILSON and HEINZ SCHILD have prepared the 8th and 9th editions, which appeared in 1952 and 1959. Pharmacology has advanced rapidly, and the book has grown, in this last edition, from 690 to 750 pages; the introduction of 65 new figures has raised the total number from 120 to 165, so that 20 figures must have been discarded; there is a remarkable picture drawn under the influence of LSD (lysergic acid diethylamide).

This book provides a readable general account of those aspects of pharmacology which are of interest to medicine. It is up to date and reliable and contains general references for further reading, and lists of the more important official preparations of drugs with their doses.

The 9th edition contains a number of new features which improve the value of the book. The chapter on the general principles of drug action has five new pages dealing with bioassays and clinical trials, which partly fill a gap present in the older editions. There are new pages about chemical transmitters and about hormones. The chapter on inorganic metabolism has been omitted. The chapter on the functions of the central nervous system has been replaced by new and valuable chapters dealing with methods of testing the effects of drugs on the mind (by Dr. HANNAH STEINBERG). There is a valuable account of the pharmacology of LSD, which causes temporary insanity, chlorpromazine reserpine and

meprobamate which are used in the treatment of insanity, of drugs which banish boredom and drugs which banish fear. The chapters dealing with the blood, the kidneys, and chemotherapy have all increased in length.

Errors and omissions are few and unimportant. The molecular weight of insulin is given as 48,000; adrenaline is said to be excreted as a sulphate (there is no evidence for this) the release of 5-hydroxy-tryptamine by reserpine is mentioned, but not that of noradrenaline, which may well be more important. These minor faults do not spoil the value of the book and are only mentioned to show that the reviewer has studied the text. The authors are to be congratulated on a good piece of work.

J. H. GADDUM