## books of the week

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ADVANCES IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY, Vol. 2—James N. Pitts, Jr. and Robert L. Metcalf, Eds.—Wiley-Interscience, 1971, 354 p., illus., \$17.95. Articles cover topics ranging from broad considerations of air pollution and specific techniques for its measurement to environmental pollution by mercury, and toxicity and carcinogenicity of aflatoxins.

ANNUAL REVIEW OF GENETICS, Vol. 5—Herschel L. Roman, Laurence M. Sandler and Allan Campbell, Eds.—Annual Reviews, 1971, 511 p., illus., \$10. Topics of review articles range from recent work on isozymes in man, genetic basis of abortion, and recombination in yeast, to morphogenesis of animal viruses, extrachromosomal inheritance, and the origin of maize.

THE BIOLOGICAL IMPERATIVES: Health, Politics and Human Survival—Allan Chase—Holt, 1972, 415 p., \$8.95. An informative volume of social biology, evaluates the state of health care today from every angle—medical, nutritional, social, economic, political, chemical and biological, and suggests a whole set of preventive health measures to improve the status guo.

BIOPHYSICS AND PHYSIOLOGY OF EXCITABLE MEMBRANES—William J. Adelman, Jr., Ed.—Van Nostrand Reinhold, 1971, 527 p., photographs, diagrams, \$24.50. Brings together the research efforts of 18 investigators in the field, covering such areas as X-ray analysis, voltage clamp methods, optical stud-

ies of action potentials, excitability models, and the varieties of excitable membranes.

CITY CLASSIFICATION HANDBOOK: Methods and Applications—Brian J. L. Berry, Ed. with Catherine B. Smith, Asst.—Wiley-Interscience, 1972, 394 p., diagrams, maps, tables, \$19.95. Identifies the many pertinent variables which affect city characteristics in order to facilitate the useful classification of highly diverse urban environments for the purpose of social and political research.

COMPUTER SIMULATION OF HUMAN BEHAVIOR—John M. Dutton and William H. Starbuck—Wiley, 1971, 708 p., diagrams, \$19.95. Comprehensive treatment of simulation model construction, simulation of thought processes, of interacting individuals, simulating voting systems and econometric models, concluding with a discussion of methodological issues.

COULOMB and the Evolution of Physics and Engineering in Eighteenth-Century France—C. Stewart Gillmor—Princeton Univ. Press, 1972, 328 p., illus., \$13.50. Gives a full account of Coulomb's life and an assessment of his major contributions in the areas of torsion, electricity and magnetism, his fundamental studies in strength of materials, soil mechanics, structural design and friction.

DENTAL MORPHOLOGY AND EVOLUTION—Albert A. Dahlberg, Ed.—Univ. of Chicago Press, 1971, 350 p., photographs, drawings, \$18.50. Symposium papers by anatomists, paleontologists, embryologists, anthropologists and odontologists range from discussion of tooth germination and growth to description of the teeth of megalithic man.

FOURTH EUROPEAN MARINE BIOL-OGY SYMPOSIUM—D. J. Crisp, Ed.— Cambridge Univ. Press, 1972, 608 p., plates, diagrams, maps, tables, \$39.50. Papers discuss the behavior and structure of larvae of ani-mals that attach themselves to rocks, pilings, and ships' hulls; second part is concerned with measurement of light in the sea and the effect of light on growth of seaweeds and on reproduction and behavior of marine animals.

FUNDAMENTALS OF THE FUNGI— Elizabeth Moore-Landecker—Prentice-Hall, 1972, 482 p., photographs, drawings, dia-grams, \$16. Provides a broad introduction to the field of mycology, explores the morphol-ogy, taxonomy, physiology, ecology, and com-mercial utilization of the fungi.

LIPOPATHIES—Ronald L. Searcy—Thomas C. C., 1971, 281 p., illus., \$15. Monograph brings together a large number of impairments that include among their features definite changes in fat metabolism, such as lipid maldigestion, lipid malabsorption, normolipemia, hyperlipemia, hypolipemia, and lipid storage diseases.

MAN AND NATURE: Philosophical Issues in Biology—Ronald Munson, Ed.—Delta Bk., 1971, 413 p., paper, \$2.95. Essays on methodological issues in biology, cause and purpose, evolution as a theory, the species concept, and issues of biology and ethics.

THE MECHANICS OF THE MIND—Thomas F. Lohr—Venture Bks., 1971, 516 p., illus., \$11.95. Psychologist attempts to interpret the phenomenon of mind in terms of the physiological processes of the nervous system and explores the philosophical implications of his theory. his theory.

NEW ENERGY TECHNOLOGY: NEW ENERGY TECHNOLOGY: Some Facts and Assessments—H. C. Hottel and J. B. Howard—MIT Press, 1971, 364 p., diagrams, paper, \$2.95. Report concentrates on the technological status of energy and fuel conservation in the U.S. Examines in turn most of the various methods of energy production, and assesses the technical and economic adequacy of existing and proposed processes. processes.

1972 YEARBOOK OF ASTRONOMY—Patrick Moore, Ed.—Norton, 1972, 227 p., illus., \$5.95. Offers information in diagrammatic and descriptive form, star charts facilitate locating the movement of the planets described in the monthly notes. Articles range from fireballs, and the far side of the moon to discussion of the Newtonian flat and its mounting.

PHYSICAL COSMOLOGY—P. J. E. Peebles—Princeton Univ. Press, 1972, 282 p., diagrams, paper, \$9. Intended for the experimentalist or observer, the book deals with such topics as the homogeneity and isotropy of the universe, the microwave background and the primeval fireball hypothesis, the dynamic and thermal history of the universe, and primeval helium.

POLYMER SCIENCE AND MATERIALS Arthur V. Tobolsky and Herman F. Mark, Eds.—Wiley-Interscience, 1971, 404 p., photographs, diagrams, \$21.50. Presents fundamental ideas of polymer science in as simple a manner as possible, from polymer molecules, thermodynamics of polymer solutions, to crystallinity of polymers, and diffusion through polymers.

THE PSYCHOLOGY OF LEARNING MATHEMATICS—Richard R. Skemp—Penguin Bks., 1971, 319 p., diagrams, paper, \$2.25. Both a mathematician and a psychologist, the author first analyzes the thought processes which people adopt when they do mathematics, then develops a kind of mathematics textbook based on the psychological insights gained.

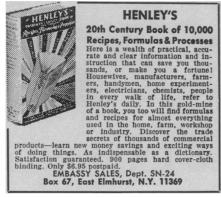
RESERVOIR FISHERIES AND LIMNOL-OGY—Gordon E. Hall, Ed.—Am. Fisheries Soc., 1971, 511 p., diagrams, maps, \$14. Technical papers seek solutions to reservoir problems from many angles, from life cycle studies of reservoir fishes to the productivity bases on which fish populations are dependent, from management techniques in providing sport fish to mathematical sampling methods in interpreting population dynamics data.

SIMULATED PATIENTS (Programmed Patients): The Development and Use of a New Technique in Medical Education—Howard S. Barrows, M.D.—Thomas, C. C., 1971, 63 p., illus., paper, \$5.75. Describes the clinical techniques of using a person trained to reproduce faithfully the psychological, emotional, historical and physical manifestations of a patient under examination.



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