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## BOOK REVIEWS

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**Annual Review of Public Health** by Lester Breslow (Published by Annual Reviews Inc., 4139, El Camino Way, Palo Alto, California 94306, USA) Vol. 6, 1985, pp. 447, Price USA \$27-00, Elsewhere \$30-00.

Some public health problems of the developed industrialised countries with special emphasis on the American scene form the subject matter of the reviews.

One of the most interesting developments in health care in USA in recent years has been the rather sudden appearance and the rapid spread of hospice programmes for the care of the dying. This provides a unique case study of the development of a new form of patient care. 'Hospice care—What have we learned?', reviews the state of hospice programme specifically and about the American health-care system in general.

The time has come to have some social consensus concerning the trade-off between the costs of medical services and the life-extending benefits that result. 'Techniques for assessing hospital case mix' provides an overview of the leading approaches to case mix measurements. Cost effectiveness analysis has an important role to play in clarifying the issues surrounding the medical technologies and practices such as those directed at treatment and prevention of heart diseases. Cost effectiveness of interventions to prevent or of various therapeutic options in practice to treat coronary heart disease is reviewed. How a well conceived community-based programme can have an important impact on life-styles and risk factors' levels is discussed in 'The community based strategy to prevent coronary heart disease'.

Quantitative risk assessment is the process of estimating risks to populations exposed to hazardous agents or activities. The potential benefits of having such an assessment is detailed in the review. Epidemiology and biostatistics area is covered by reviews titled 'Mathematical modeling strategies for analysis of epidemiological research'; 'Findings for Public Health from Meta-analysis' and the 'Effect of computer science advancements in Public Health research'.

Environmental and occupational health problems are given appreciable attention through a number of reviews and a symposium on occupational health. 'Hazardous waste disposal' presents emerging technologies and public policies to reduce public health risks'. 'The role of different approaches and strategies

applied to reduce childhood lead exposure' is an informative review. The symposium highlights the problems encountered in determining the extent of occupational health hazard by the approximately one thousand chemicals introduced every year. Defining stress as not a nebulous emotional individual experience but rather a multifaceted, environmentally determined phenomenon, the topics presented cover, 'the study of stress at work; the right to know the toxic information in the workplace by the workers; Fatal and non fatal injuries in occupational settings and surveillance for the effects of workplace exposure.

Public health diseases of current interest reviewed relate to 'Epidemiology of sexually transmitted diseases including acquired immuno-deficiency syndrome', 'Legal aspects of human genetics' and 'Post-neonatal mortality'.

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**Circuit Theory** by T. S. K. Iyer (Tata McGraw Hill Publishing Co. Ltd., 12/4 Asaf Ali Road, 3rd Floor, New Delhi 110 002) 1985, pp. 536, Price: Rs.39,-

This book is a welcome addition to the several text books on circuit theory already available. The book assumes a background knowledge of Calculus, elements of Linear Algebra, and Complex variables. This book can be used as a text book for the first course in network theory. The contents are adequate for a first course, as well as a second course on circuit theory for engineering students and physicists. However, students belonging to the Electrical and Electronics Engineering discipline, need additional topics such as three-phase circuits.

The first six chapters of the book covering the topics, on Kirchhoff's laws and circuit elements, the differential equation approach to the solution, steady state system functions, Node and Mesh analysis, Laplace transforms and Network theorems are adequate for a first one-semester course on circuit theory.

The remaining chapters which deal with properties of network functions, Two port parameters and Ideal

two port devices, Elements of passive network synthesis, Image impedance and classical filters, Modern filter theory and active RC-filters, and state variable method of circuit analysis, can be used for a second one-semester course on circuit theory.

The book contains a summary of the results of the topics on Fourier series and Fourier integrals, given at the end in the form of two appendices.

The book essentially discusses linear time-invariant circuits. Contrary to what the author implies in the preface, circuit theory has also to consider time-varying and nonlinear circuits. However, for an introductory course on circuit theory, a study of linear time-invariant circuits is adequate. The author could perhaps have included a brief account of linearization to emphasise the fact that majority of circuits in practice is nonlinear in nature.

The book is well written. Each chapter contains several worked examples and reinforce the theory contained in each chapter. Review questions at the end of each chapter are helpful for the student in recapitulating the important concepts studied earlier. The author has provided adequate problems for the students to work out. The answers to these problems given at the end of the problem are useful in checking the solution.

A noteworthy feature of the book is the inclusion of a collection of multiple-choice questions which are categorised as those on basic circuit theory and those that are advanced in nature. The answers to these multiple choice questions are given separately. These questions would stimulate the minds of the students and motivate them to correctly grasp the fundamental concepts of circuit theory.

The cost of the book is quite reasonable.

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**Freshwater Diatoms of Maharashtra** by P. T. Sarode and N. D. Kamat, (Published by Saikripa Prakashan, 'Saikripa', 299 N-IC, CIDCO, Aurangabad 413 003), 1984, pp. 338, Price not given.

The book gives a comprehensive account of the freshwater diatoms of the Maharashtra state. Six

hundred and fifty eight taxa of diatoms belonging to 29 genera are described in this treatise out of which 53 are new to science. These diatoms represent 25 years of patient and meticulous collection of samples from various locations within the state which are indicated precisely in the map. A small introduction briefly deals with methods of collection, cleaning and mounting of diatoms. A note on freshwater diatoms of the Maharashtra and a general account of research on these in India give the reader a general idea of the volume of research work in this field in this country. A large part of the book is devoted to the systematic account which includes a good description of each diatom species and places of its occurrence in the state. Each taxon is provided with atleast one very well drawn camera lucida sketch and only one reference is cited to which the taxon is in close agreement. This eliminates the necessity of citing a whole lot of literature which can easily be obtained by reference to the ones cited. All genera are keyed to the species level and the genera of orders Pennales and Centrales are similarly keyed. Giving a list of commonly used terms to corresponding figures removes much of the ambiguity in such descriptive accounts while making it clear to the reader what the authors actually mean in each description.

The systematic treatment follows the early classical pattern and does not reflect the authors' own thinking on the classification of diatoms. The authors may have valid reasons for creating new species but without any comment on how new species are different from the existing ones the reader is left in doubt as to why at all, they are described as new. Figures are neatly executed and these have taken the reduction well. A serious error, however, is that nowhere do the authors give magnification or scale bar for figures. As identification of diatom species is based on dimensions and the number of punctation or striation per unit length, lack of this feature minimizes the value of the description.

The quality of printing is uniformly good. The book will be very useful to those who wish to carry out taxonomic studies on the freshwater diatoms and merits a place in any library.

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