BOOK REVIEWS

Multivariate Statistical Analysis in Geography :

A primer on the general linear model. R. J. Johnston. Longman–London and New York, 1978 p 280. 96 figures, 41 tables and References, £ 5.95

Ever increasing use of the statistical techniques in geographical research was always demanding a comprehensive work on the multivariate analysis in geography. A large number of books are available now for elementary methodology and a few books like those of King (1969), and Taylor (1977) treat more advanced techniques. This book can be considered as an important addition to the available literature on the subject.

The author rightly points out in the introduction that any geographical problem requires handling a large amount of variables which are possibly having causal relationship. Assuming a basic knowledge of reader to the extent of handling the bivariate data; the author points out various assumptions of regression model in chapter II. In the following chapters from III to IX various aspects of multivariate models are explained. The chapter multiple correlation and regression includes topics like transformation of data which is essential in many geographical situations. It also includes trend surface analysis. Fourth chapter is completely devoted to the " analysis of variance " which includes two way –three way analysis and also a detailed discussion on dummy variables, interaction variables and analysis of covariance. Principal component and factor analysis are outlined in the next chapter and instead of giving details of computational steps involved, the author has explained the basis of analysis through geometrical representation of correlation. A ' real world ' expample has been added to explain various steps in principal component analysis. In case of factor analysis, meaning and necessity of rotation and its types are covered besides the interpretations. Later part of the book covers topics on Canonical correlation and discriminant analysis which are not in common use as yet; but are equally important in geographical research. Apart from these, a chapter on classification includes treatment on univariate, bivariate and multivariate examples and discussion on grouping, classification and regionalization.

The last chapter on multivariate analysis and geographical data deals with spatial auto-correlation and nature of geographical observation unit or individual. It also includes a brief discussion as closed number sets and independance.

S. R. J.

Floods : A Geographical Perspective

Roy Ward. Focal problems in geography series : Mac Millan : 1978, p 244, 47 figures, 11 plates and bibliography £.3.95

A new addition in the series of 'Focal problems in Geography' deals with the problems of floods. The book not only