

# BIOSTATISTICS

The book 'Biostatistics' consists of ten chapters explaining statistical tools used in analyzing biological, biomedical and biochemical experimental data. Statistical tools, techniques and methods are explained with many real life problems and special care is taken to explain mathematical formulae and calculations keeping in view that the readers are non-mathematical students who are not having much mathematical background.

The book mainly concentrates on (1) Collection, classification and tabulation of data, (2) Presentation of Data (both diagrammatic and graphical representation)

(3) Analysis and (4) Inference (both estimation of parameters and testing of hypotheses). Most popularly used DMR test, by any biological students is also discussed along with its applications. At the end of each chapter, self assessment questions are given. This book can also be used by civil, mechanical, electrical and computer engineers in analyzing their experimental data and to take statistically valid decisions.

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BIOSTATISTICS



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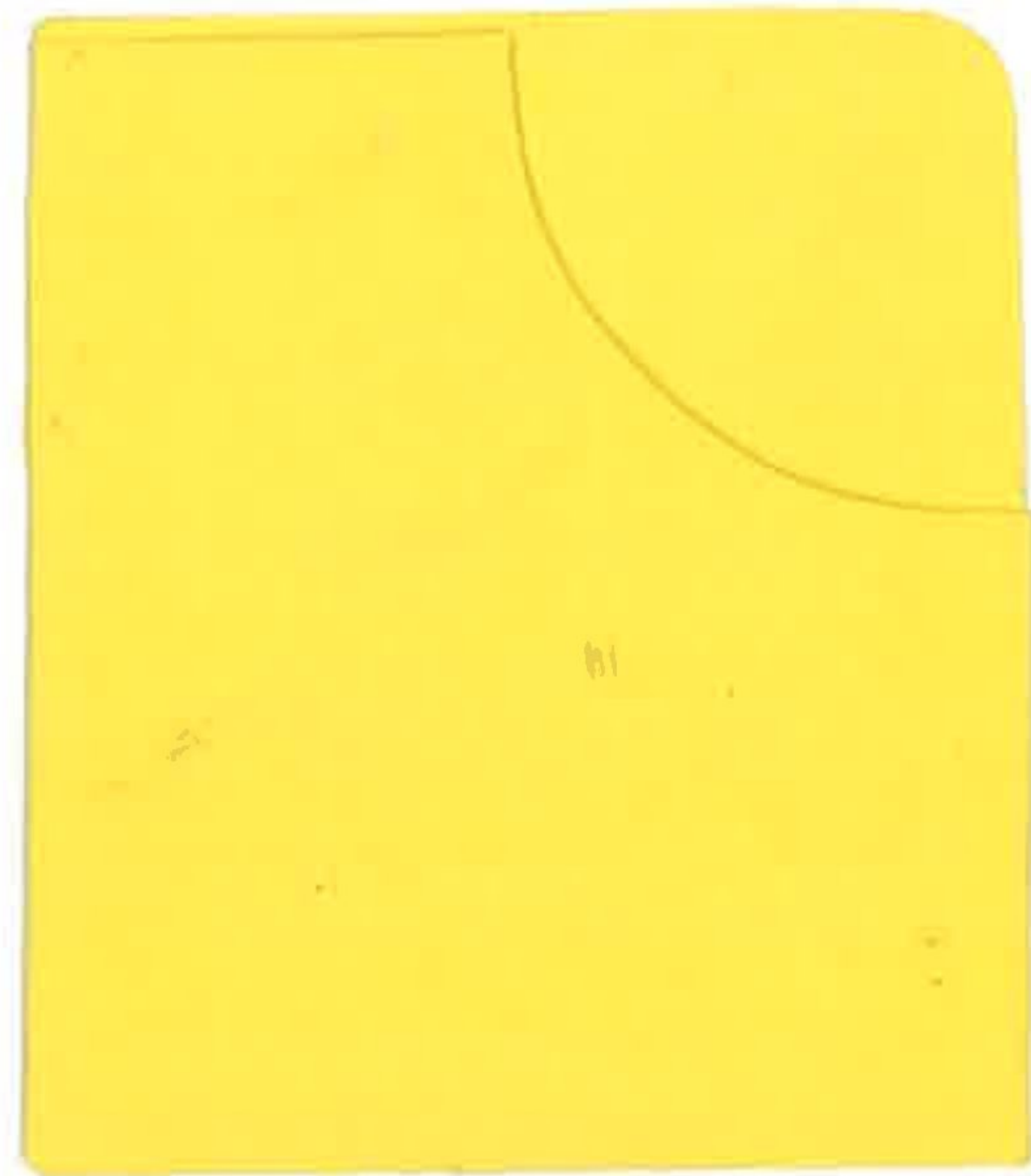




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## PREFACE

Biostatistics is a part of curriculum of M.Phil. and Ph.D. written examination (Research Methodology paper), Post Graduate courses in Agriculture, Veterinary Science, Fishery Science, Medicine, Forestry, Pharmacy, Botany, Zoology, Biochemistry, Microbiology, Biotechnology and Bioinformatics. It is also a part of curriculum in undergraduate courses of Medicine, Agriculture, Veterinary Science, Biotechnology and Bioinformatics. Not many books are available in the market on this subject. This book is answer to this requirement. In fact the idea of writing this book came from the suggestions made by many biological students studying, M.Sc. Zoology, Botany, Microbiology, Biochemistry, Biotechnology and Sericulture. Keeping the needs of students studying above courses, relevant topics were discussed clearly, using less mathematical symbols with many real life examples. Much concentration was made to explain the need, applications of statistical tools and techniques for experimental data.

The book can also be used by research scholars working for their Ph.D., degrees in above fields along with M.B.A., Commerce, Economics, Rural development and engineering. Scholars working in Agriculture, industrial applications, fisheries, market research, share forecasting and forest research can use this book as 'hand book' which can give guidance in conducting their respective experiments. This book covers the syllabus of Biostatistics of all the above mentioned courses. We request the Teachers and students to give suggestions for improvement of the book.

We thank all the teachers for their suggestions and stimulating discussion on the subject.

Anantapur

K.L.A.P. Sarma

B. Ravindra Reddy

T. Pullaiah

### T. Pullaiah

Dr. T. Pullaiah, Professor, Department of Botany, Sri Krishnadevaraya university, Anantpur. Besides this, he held several positions in the University which include Dean, Head of the Department, Member of Species Survival Commission on International Union for Conservation of Nature (IUCN) and Natural Resources.

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