

PREFACE

This book entitled "**Problems on Genetics, Molecular Genetics and Evolutionary Genetics**" is based on my experience of teaching Genetics, Molecular Genetics and Evolutionary Genetics to the students of Biological Sciences.

Genetics, the science of heredity, is a core subject in Biological Science. Most of the Genetic principles can be precisely expressed in mathematical terms. Basic Genetics can easily be expressed through mathematical illustrations and problems.

Molecular Biology is a modern dynamic biological subject in the 21st century. **Biotechnology** is one of the facets of Science. It has been introduced in syllabus of most of the Indian Universities at undergraduate and postgraduate level. Therefore, problems regarding **Molecular Genetics** including Biotechnology have been incorporated in this book for growing interest in this subject.

Population Genetics, Natural Selection, Molecular Evolution are current topics of Evolutionary Biology as well as Evolutionary Genetics. Evolutionary theory can easily be analysed through mathematical expression. Therefore, numerous problems regarding **Evolutionary Genetics** have been added in this book.

I claim no originality for the matter presented in this book but the method of presentation and illustration is my own. This book has been written in clear, lucid language to cover theoretical and mathematical approaches of the matter. It will help the undergraduate and post-graduate students of Biological Sciences of different colleges and universities for academic and competitive examinations.

In preparing this book, I have taken profuse help from several books. I have expressed my acknowledgement in the bibliography. I am indebted to my respected teacher Prof. R. N. Chatterjee (**Genetics Research Unit**, Dept. of Zoology, Calcutta University) for his constant inspiration and encouragement. I convey my respect and pranam to Swami Atmapriyanandaji Maharaj [Vice Chancellor, Ramakrishna Mission Vivekananda Educational Research Institute (Deemed University under U. G. C. Act)] for his enthusiastic inspiration which has driven me to prepare this book. I extend my respect and gratitude to Prof. A. K. Dutta Gupta (Retired) (**Genetics Research Unit**, Dept. of Zoology, Calcutta University) for his help and co-operation. I also extend my thanks to Prof. C. Chakrabarty (Head of the Dept. of Zoology, Burdwan University), Dr T. K. Banerjee (R. P. M. College, Uttarpara), Dr K. K. Mukherjee (Serampore College) and my best friend Swaraj for their inspiration and encouragement for the preparation of this book.

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