

BRIEF CONTENTS

Detailed Contents

Preface

1	Genetics: An Introduction	1
2	Mendelian Genetics	17
3	Chromosomal Basis of Inheritance, Sex Determination, and Sex Linkage	47
4	Extensions of Mendelian Genetic Analysis	97
5	Genetic Mapping in Eukaryotes I	133
6	Genetic Mapping in Eukaryotes II	168
7	Chromosomal Mutations	190
8	Genetic Mapping in Bacteria and Bacteriophages	224
9	The Beginnings of Molecular Genetics: Gene Function	265
10	The Structure of Genetic Material	291
11	The Organization of DNA in Chromosomes	313
12	DNA Replication and Recombination	343
13	Transcription, RNA Molecules, and RNA Processing	379
14	The Genetic Code and the Translation of the Genetic Message	418
15	Recombinant DNA Technology and the Manipulation of DNA	446
16	Regulation of Gene Expression in Bacteria and Bacteriophages	501
17	Regulation of Gene Expression and Development in Eukaryotes	535
18	Genetics of Cancer	585
19	Gene Mutation	615
20	Transposable Elements	654
21	Extranuclear Genetics	679
22	Population Genetics	714
23	Quantitative Genetics	772
	Suggested Readings	R-1
	Solutions to Selected Questions and Problems	S-1
	Glossary	G-1
	Credits	C-1
	Index	I-1