

Contents

Preface to Second Edition	vii
Preface to First Edition	ix
Acknowledgements	xi
About the Companion Website	xiii
I Introduction	
1 Microbiology: What, Why and How?	3
2 Biochemical Principles	19
3 Cell Structure and Organisation	53
II Microbial Nutrition, Growth and Metabolism	
4 Microbial Nutrition and Cultivation	83
5 Microbial Growth	97
6 Microbial Metabolism	115
III Microbial Diversity	
7 Prokaryote Diversity	171
8 The Fungi	203
9 The Protista	217
10 Viruses	243
IV Microbial Genetics	
11 Microbial Genetics	271
12 Microorganisms in Genetic Engineering	319

V	Microorganisms in the Environment	
13	Microbial Associations	345
14	Microorganisms in the Environment	357
VI	Medical Microbiology	
15	Human Microbial Diseases	375
16	The Control of Microorganisms	403
17	Antimicrobial Agents	419
VII	Microorganisms in Industry	
18	Industrial and Food Microbiology	449
	Glossary	467
	Further Reading	485
	Index	491