Contents

CHAPTERS

I	On the Methodology of Mathematical Models	3
II	Preference Rankings • An Axiomatic Approach	9
III	Ecology • Two Dynamic Models	24
IV	Market Stability • A Dynamic Model	35
V	A Markov Chain Model in Sociology	54
VI	Stabilization of Money Flow	
	An Application of Discrete Potential Theory	66
VII	Branching Processes	78
VIII	Organization Theory • Applications of Graph Theory	95
IX	Optimal Scheduling • A Problem in Dynamic Programming	109
APPENDIXES		
APPEN	NDIXES	
APPEN A	NDIXES A Fixed Point Theorem	123
		123 125
A	A Fixed Point Theorem	
A B	A Fixed Point Theorem Utility Functions	125
A B C	A Fixed Point Theorem Utility Functions Finite Markov Chains	125 128

INDEX 141