CONTENTS

Difference Methods for Initial-Value Problems

PART I: GENERAL CONSIDERATIONS

CHAPTER I

Introduction

CHAPTER II

Linear Operators

CHAPTER III

Linear Difference Equations

Chapter IV

Pure Initial-Value Problems with Constant Coefficients

Chapter V

Multi-Level Difference Equations

PART II: APPLICATIONS

Chapter VI

Diffusion and Heat Flow

CHAPTER VII

The Transport Equation

CHAPTER VIII

Sound Waves

CHAPTER IX

Elastic Vibrations

CHAPTER X

Fluid Dynamics in One Space Variable