

CONTENTS

Lecture 1.	MATHEMATICAL PRELIMINARIES	1
Lecture 2.	NUMERICAL SOLUTION OF THE INTERIOR AND THE EXTERIOR DIRICHLET PROBLEMS	22
Lecture 3.	NUMERICAL SOLUTION OF PROBLEMS FOR GENERAL LINEAR AND SINGULAR ELLIPTIC EQUATIONS	38
Lecture 4.	LINEAR PROBLEMS IN THREE DIMENSIONS AND THE CLASSICAL PROBLEM OF CAPACITY	52
Lecture 5.	MILDLY NONLINEAR ELLIPTIC PROBLEMS	65
Lecture 6.	MILDLY NONLINEAR PARABOLIC PROBLEMS	73
Lecture 7.	MILDLY NONLINEAR HYPERBOLIC PROBLEMS	85
Lecture 8.	APPROXIMATE EXTREMIZATIONS OF FUNCTIONALS	96
Lecture 9.	NONLINEAR PROBLEMS	108
Lecture 10.	STEADY STATE NAVIER STOKES PROBLEMS	122
	BIBLIOGRAPHY	148