CONTENTS

| Preface | |
|---|-----------|
| Chapter I. Preliminaries | 1 |
| Chapter II. Fundamental theorems | 10 |
| Chapter III. Theorem 1: proof for cyclotomic extensions | 24 |
| Chapter IV. Theorem 1: proof for cyclic extensions | 28 |
| Chapter V. Theorem 1: proof for abelian extensions | 46 |
| Chapter VI. Idele class group and the unit theorem | 48 |
| Chapter VII. First fundamental inequality | 60 |
| Chapter VIII. Second fundamental inequality | 80 |
| Chapter IX. Kronecker's theorem | 98 |
| Chapter X. Norm residue symbol | 101 |
| Chapter XI. Norm residue symbol for Kummer exten- | |
| sions | 124 |
| Chapter XII. Existence theorem | 147 |

Typeset by $\mathcal{A}_{\mathcal{M}}\!\mathcal{S}\text{-}T_{\!E}\!X$