
Contents

Part I:	Cohomology of Finite Groups	1
§ 1.	<i>G</i> -Modules	3
§ 2.	The Definition of Cohomology Groups	11
§ 3.	The Exact Cohomology Sequence	20
§ 4.	Inflation, Restriction and Corestriction	32
§ 5.	The Cup Product	44
§ 6.	Cohomology of Cyclic Groups	51
§ 7.	Tate's Theorem	57
Part II:	Local Class Field Theory	61
§ 1.	Abstract Class Field Theory	63
§ 2.	Galois Cohomology	77
§ 3.	The Multiplicative Group of a p -adic Number Field	79
§ 4.	The Class Formation of Unramified Extensions	82
§ 5.	The Local Reciprocity Law	89
§ 6.	The Existence Theorem	95
§ 7.	Explicit Determination of the Norm Residue Symbol	98
Part III:	Global Class Field Theory	111
§ 1.	Number Theoretic Preliminaries	113
§ 2.	Idèles and Idèle Classes	117
§ 3.	Cohomology of the Idèle Group	122
§ 4.	Cohomology of the Idèle Class Group	128
§ 5.	Idèle Invariants	138
§ 6.	The Reciprocity Law	146
§ 7.	The Existence Theorem	156
§ 8.	The Decomposition Law	168
§ 9.	The Ideal Theoretic Formulation of Class Field Theory	173
References		181
Index		183