

TABLE OF CONTENTS

§1.	INTRODUCTION	3
	A. General remarks	3
	B. Quadratic modules	5
	C. Hermitian modules	11
	D. The necessity for refined definitions	15
§2.	HYPERBOLIC AND METABOLIC MODULES	17
§3.	AUTOMORPHISM GROUPS OF NONSINGULAR MODULES	24
§4.	K-THEORY GROUPS OF NONSINGULAR MODULES	60
	A. The K_1 -functors	60
	B. The K_2 -functors	62
	C. Relativization	66
§5.	HOMOLOGY EXACT SEQUENCES	70
	A. Homology groups and central extensions	70
	B. The relative sequence of a homomorphism	74
	C. The Mayer-Vietoris sequence of a fibre square	78
	D. Excision	85
§6.	K-THEORY IN CATEGORIES WITH PRODUCT	93
	A. Fibre product categories	93
	B. The relative sequence of a product preserving functor	97
	C. The Mayer-Vietoris sequence of a fibre square	107
	D. Excision	110
§7.	K-THEORY OF NONSINGULAR AND PROJECTIVE MODULES	113
	A. Approximation squares	114
	B. Arithmetic and localization, completion squares	126
	C. Conductor and related squares	133
	D. Fibre product categories	139
	E. Restricted direct products	145
	F. Orders	151
§8.	COMPARISON EXACT SEQUENCES	155
	A. Change of K_1 -torsion	155
	B. Change of K_2 -torsion	161
	C. Kernels and cokernels of hyperbolic and metabolic maps	178

§9. SCALING AND MORITA THEORY	180
§10. REDUCTION MODULO A COMPLETE IDEAL	184
§11. CHANGE OF FORM PARAMETER	190
A. The group $S(\Gamma/\Lambda)$	190
B. The group $T(\Gamma/\Lambda)$	206
§12. INDUCTION THEORY	232
A. Frobenius modules	232
B. Induction machine	242
§13. ALTERNATE DEFINITIONS OF QUADRATIC MODULES	251
§14. REMARKS ON NOTATION	256
§15. WALL'S SURGERY GROUPS	258
BIBLIOGRAPHY	259
SUBJECT INDEX	262
NOTATION INDEX	266