

PREFACE	ix
INTRODUCTION	xi
1. FRÖHLICH'S DESCRIPTION OF CLASSGROUPS	1
1 An exact sequence from K-theory	1
2 Notation	4
3 Fröhlich's description	10
4 Functoriality	14
5 Duality	19
2. CHARACTER ACTION	21
1 The Swan-Ullom theorem	21
2 Frobenius module structure	24
3. SWAN MODULES	26
1 Basic properties	26
2 The p-group case	29
3 Self-duality of rings of integers	31
4. REDUCTION THEORY	34
1 The mod ℓ congruences	34
2 Some general results	37
3 Generalised dihedral groups	39
5. TORSION DETERMINANTS	45
6. THE GROUP LOGARITHM	52
1 The main results	52
2 Proof of Theorem 1.2(b)	64
3 Q-p-elementary groups	67
7. SWAN MODULES, CLASSGROUPS OF EXCEPTIONAL GROUPS	73
1 Non-exceptional p-groups and Wall's conjecture	73

2	Exceptional 2-groups	79
8.	THE EXTENSION THEOREM FOR $K_0 T$	91
9.	ADAMS OPERATIONS FOR CLASSGROUPS	96
1	Statement of results	98
2	Reduction to Q-p-elementary groups	104
3	Proof of (2.3)	106
	REFERENCES	117