

CONTENTS

	PAGE
SUMMARY	i
 CHAPTER (I) PROJECTIVE REPRESENTATION	
OF FINITE GROUPS	1
1.1 Partitions	1
1.2 Hooks	3
1.3 Double Partitions	4
1.4 Factor sets and α -regular classes	4
1.5 Projective representations of finite groups.....	6
1.6 Restriction, Induction and Lifting process	9
1.7 Product of Characters	13
 CHAPTER (II) PROJECTIVE CHARACTERS OF	
SYMMETRIC GROUPS AND ALTERNATING GROUPS	14
2.1 The symmetric group	14
2.2 Linear and Projective characters of S_L	16
2.3 Linear and projective characters of A_L	18
2.4 Young subgroup.....	28
 CHAPTER (III) PROJECTIVE CHARACTERS OF THE	
WEYL GROUP B_L	31
3.1 The group B_L and its properties	31
3.2 Generalized Young subgroup	38
3.3 Irreducible projective characters of B_L with factor	

set $\alpha \in (-1, -1, -1)$	45
3.4 Irreducible projective characters of B_L with factor	
set $\alpha \in (1, -1, -1)$	52
3.5 Irreducible projective characters of B_L with factor	
set $\alpha \in (1, 1, 1)$	64
CHAPTER (IV) PROJECTIVE CHARACTERS OF THE	
WEYL GROUP OF TYPE D_L	70
4.1 The group D_L and its properties	70
4.2 Irreducible Projective characters of D_L with factor	
set $\alpha \in (-1, -1)$	72
4.3 Irreducible projective characters of D_L with factor	
set $\alpha \in (1, -1)$	79

REFERENCES

ARABIC SUMMARY