

ABSTRACT

In this thesis we have shown that for each partition of n , there corresponds an irreducible representation of S_n over the field of complex number. The dimensions (degrees) of these irreducible representations are the dimensions (degrees) of irreducible characters. In the end the character values of the character table S_6 are computed by the “**syLOW theory**” and “**orthogonality relations of characters**”. Moreover the existence of A_5 in S_6 is also included.