

In this paper, we investigated some properties associated with the action of symmetric group  $S_n$  ( $n \leq 7$ ) acting on  $X^{(3)}$ . If  $G_x$  is the stabilizer of  $x$ , the lengths of the orbits of  $G_x$  on  $X$  are called sub-degrees and the numbers of orbits are called ranks. Ranks and sub-degrees of symmetric groups  $S_n$  ( $n=1, 2, \dots$ ) acting on 2-elements subsets from the set  $X = \{1, 2, \dots, n\}$  have been calculated by Higman (1970). He showed that the rank is 3 and the sub-degrees are. Therefore, we extend these calculations to the specific symmetric groups  $S_n$  ( $n \leq 7$ ) acting on  $X^{(3)}$ .