

The purpose of this research is to find the number of the isomorphic functions on a finite field by using the structure of the extension field. The study begins by considering the structure of the extension field of a field of order prime p , (\mathbb{Z}_p) , and finding the number of the isomorphic functions on the previous extension field.

The study shows that, there are n isomorphic functions on a finite field of order p^n , where n is a positive integer.