Document Type	: Thesis
Document Title	: _On the ideal theory of BCK (BCI) - Algebras_
	حول نظرية المثالي في جبور (BCIBCK)
Document Language	: Arabic

Abstract : The notion of BCK-algebra was formulated in 1966 by Y. Imai and K. Iseki. The motivations of the theory of BCK-algebra are based on set theory. The most fundamental operations in set theory are the union, the intersection and the set difference of any two given sets. The ideal theory of BCK-algebras and BCI-algebras play an important role in studying the algebraic structure under our consideration. The ideal theory of BCK- algebras and BCI-algebras have been of great interest in context of this thesis. This Thesis has been divided to four mapters. In Chapter 1, we give the definition and the basic properties of the theory of BCK-algebra and BCI-algebra, which are fundamental and shall be used in the 9ther mapters. Furthermore, the substructures of these algebras have been studied. In Chapter 2, we study the ideal theory of BCK-algebras. We also study various types of ideals such as implicative ideals, commutative ideals, prime ideals, positive implicative ideals, and some relations between them. In Chapter 3, we study various types of ideals in BCI-algebras. The important ideals are the closed ideals, implicative ideals, commutative ideals, prime ideals and p- ideals. In this chapter the notion of annihilators in BCI-algebra has been introduced. The basic properties of annihilators have been studied in details. We have proved that the aIulihilator is an ideal of a BCI-algebra. Chapter 4 is devoted to study the radicals in BCI-algebras. In this chapter, we introduce the radicals and k-semiprime ideals. The results of this chapter is a generalization of the work by Jun, Meng, and RDh. Some interesting relations among various types of ideals have been given. This chapter is totally new, and it Will be sent for publication to International Journals. These results open a new door for future research in BCI-algebras

Publishing Year	: 1995 AH