Abstract

The area of ideals is important in the study of Analysis, algebra, Geometry and Computer science. The various types of ideals have been studied, for example m ideals and h ideals. The m ideals defined on real Banach spaces are referred to as u - ideals. The natural examples of u - ideals with respect to their biduals, are order continuous Banach lattices. Using the approximation property, we shall study properties of u - ideals and their characterization. We define the set of compact operators K (X) on X to be u - ideals given that X is a separable reflexive Banach space with approximation property if and only if there is a sequence (Tn) of finite rank of operators with lim 2 1 n n $\rightarrow \infty$ I T – = and lim n n $\rightarrow \infty$ Tx x = . We shall show that u -ideals containing no copies of sequences 1 λ are strict u - ideals