

ON CONJUGATE SECONDARY RANGE k - HERMITIAN MATRICES

S. KRISHNAMOORTHY, K. GUNASEKARAN AND B. K. N. MUTHUGOBAL

Abstract

The concept of conjugate secondary range k -hermitian matrix ($\text{con-}s - k - EP$) is introduced. The characterization of $\text{con-}s - k - EP$ matrices are obtained. Relations among $\text{con-}EP$, $\text{con-}s - EP$, $\text{con-}k - EP$ and $\text{con-}s - k - EP$ matrices are discussed. Necessary and sufficient conditions are determined for a matrix to be $\text{con-}s - k - EP_r$ ($\text{con-}s - k - EP$ and of rank r).

Key Words : EP , $\text{con-}EP$, $\text{con-}k-EP$, and $\text{con-}s-EP$ matrices.

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