

## WEIGHTED COMPOSITION AND BLOCK SHIFT MATRIX OPERATORS ON $\ell^2(\mathbb{N})$ SPACE

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*Abstract.* In this paper we investigate some classes of weighted composition operators on the Hilbert space of complex valued functions on the natural numbers. Next we introduce a new model of a block matrix operator  $M(\alpha, \beta)$  induced by two sequences  $\alpha$  and  $\beta$  and characterize its  $p$ -paranormality. Then we give examples of these operators to show that the  $p$ -paranormal classes are distinct.

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