

ABSTRACT

A class of generalized vector valued difference sequence spaces $F(X, \Delta, f)$ is defined and some of its topological properties are studied. Some more properties such as inclusion relations, multiplier sequences, convergence criteria, separability etc. are studied for some particular classes.

Some inclusion relations are studied for the vector valued sequence spaces $\Delta c_0(X, \lambda, p)$ and $\Delta \ell_\infty(X, \lambda, p)$. Kothe - toeplitz duals are also studied for some particular classes.

The topological properties such as α , β , γ - duals, second α - duals, matrix transformations etc. are studied for the scalar valued sequence space $\Delta \ell_\infty(v, p)$.

The hypercyclic operators on the class $H(X, p, v)$ of vector valued generalized entire functions are studied.

A generalized product $*_B$ which unifies the Cauchy and Dirichlet products is studied on the sequence spaces $D_0^\wedge(p)$ and $D_\infty^\wedge(p)$.