

ALGEBRAIC PROPERTIES OF INTEGRAL FUNCTIONS

S. M. Ali Khan
School of Mathematical Sciences
GC University, Lahore.

For K a valued subfield of C_p with respect to the restriction of the p -adic absolute value $||$ of C_p we consider the K -algebra $IK[[X]]$ of integral (entire) functions with coefficients in K . If K is a closed subfield of C_p we extend some results which are known for subfields of C (see [3] and [4]), but the proofs are different. For example we prove that $IK[[X]]$ is a Bezout domain and we describe some properties of maximal ideals of $IK[[X]]$.

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