Definition 2. Let Ω be a family of valuations of a field K and let Ω be of finite character then the ring determined by Ω is called a ring of <u>finite character</u>.

Now let R be a ring determined by a family Ω of valuations, let R_v be a valuation ring of $v \in \Omega$, and let M_v be the maximal ideal of R_v, then the prime ideal $R \cap M_v = Z(v)$ is called the <u>centre of v on R</u>. If the localization $R_{Z(v)}$ is equal to R_v we call v an <u>essential valuation</u>. And according to Griffin, a ring R of finite character is called a <u>ring of Krull type</u> if it has a defining family of valuations consisting of essential valuations only.

Equivalently we can define a ring of Krull type as follows

Definition 3. An integral domain R is said to be a ring of Krull type if, there exists a family of prime ideals $\{P_\alpha\}_{\alpha \in I}$ such that

(1) R_{P_α} is a valuation domain for each $\alpha \in I$

(2) every non zero non unit element of R is contained in only a finite number of members of $\{P_\alpha\}_{\alpha \in I}$

(3) $R = \cap R_{P_\alpha}$; $\alpha \in I$

We shall adopt Definition 3, as the standard definition of a ring of Krull type. The family $\{P_\alpha\}_{\alpha \in I}$ can be assumed to be such that P_α, P_β are incomparable w.r.t. inclusion for each $\alpha \neq \beta \in I$. Because if $P_\alpha \subset P_\beta$; $R_{P_\beta} \supset R_{P_\alpha}$ and so $R_{P_\alpha} \cap R_{P_\beta} = R_{P_\alpha}$ i.e. P_β can be dropped from the family. Moreover if there exists a chain of prime ideals $\{P_\alpha'\} = C$ in $\{P_\alpha\}$ i.e. $P_\gamma \subset P_\delta$ or $P_\delta \subset P_\gamma$ for each pair $P_\gamma, P_\delta \in C$ then
3. since the unions and intersections of all the elements of C exist we can replace the elements of C by $P = \cup Q$, $Q \in C$. In other words we can assume that $\{P_\alpha\}$ consists of the