ABSTRACT

This dissertation is aimed to discuss some results on RΓ-modules. In this connection, first we discuss basic preliminaries.

Then isomorphism theorems , correspondence theorem and concept of direct products are defined in frame work of RΓ-modules.

Moreover, We discuss the normal series and composition series. In this connection, we establish Zassenhaus Lemma, Schrier Refinement theorem, and Jorden Hölder theorem. We introduce the notion of RΓ- Noetherian modules and establish its characterization. Further, we discuss concept of annihilators. Moreover, we introduce the concepts of generalized annihilators and associated submodules in environment of RΓ-modules. We introduce a certain topology, referred as filtration topology in the frame work of RΓ-modules.