



## INTISARI

### **KARAKTERISASI RING ABEL-GRASSMANN BERDASARKAN SIFAT-SIFAT IDEALNYA**

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Pada tesis ini secara umum dibahas tentang ideal, sistem  $I, M$ , dan  $P$ , himpunan substraktif dan semisubstraktif, dan ideal prima lemah di ring Abel-Grassmann. Lebih lanjut didefinisikan juga ideal kuasi prima dan kuasi semiprima. Materi terkait ideal di ring Abel-Grassmann digunakan untuk menyelidiki sifat-sifat ideal terkait ring Abel-Grassmann, karakteristik ideal prima dan ideal prima lemah, dan hubungannya dengan sistem  $I$  melalui ideal ireduusibel. Selanjutnya, diselidiki hubungan antara sistem  $M$  dan  $P$  di ring Abel-Grassmann dengan ideal kuasi prima dan ideal kuasi semiprima. Terakhir, didefinisikan himpunan substraktif dan himpunan semisubstraktif dan diperoleh hubungan antara ideal kuasi semiprima dan himpunan semisubstraktif.



## ABSTRACT

### ON CHARACTERIZATIONS OF ABEL-GRASSMANN RING THROUGH SOME PROPERTIES OF THEIR IDEALS

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In this thesis, we discuss about ideals,  $I, M$ , and  $P$  system, subtractive and semi-subtractive sets, and weakly prime ideals in Abel-Grassmann ring. Furthermore, quasiprime and quasi-semiprime ideals are also defined. Ideals in Abel-Grassmann ring notions are used to investigate about properties of ideals, prime and weakly prime ideals characterizations, and relations with  $I$  system through irreducible ideal. Next, we investigate relations among  $M$  and  $P$  system and quasiprime and quasi-semiprime in Abel-Grassmann ring. Finally, subtractive and semi-subtractive sets are also defined and we get result a relation between quasi-semiprime ideal and semi-subtractive sets.