INTISARI

IDEAL HAMPIR PRIMAL PADA RING KOMUTATIF

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Dalam tugas akhir ini dibahas tentang ideal hampir prima, ideal hampir primal, dan ideal hampir primary dari ring komutatif dengan elemen satuan. Suatu ideal I dikatakan hampir prima dari R jika untuk setiap $a, r \in R$ berlaku bahwa jika $ra \in I - I^2$ maka $a \in I$ atau $r \in I$. Ideal hampir prima merupakan perumuman dari ideal prima. Setiap ideal prima merupakan ideal hampir prima, tapi suatu ideal hampir prima belum tentu merupakan ideal prima. Suatu elemen $a \in R$ disebut elemen hampir prima terhadap ideal I jika untuk setiap $r \in R$ berlaku bahwa jika $ra \in I - I^2$ maka $r \in I$. Akibatnya, suatu elemen $a \in R$ disebut elemen bukan prima terhadap ideal I jika terdapat $r \in R - I$, sehingga $ra \in I - I^2$. Selanjutnya, himpunan dari elemen di R yang bukan elemen hampir prima terhadap ideal I dinotasikan dengan $A(I)$. Ideal I dikatakan ideal hampir primal dari ring R jika himpunan $A(I) \cup I^2$ merupakan suatu ideal dari R.

ABSTRACT

ALMOST PRIMAL IDEAL IN COMMUTATIVE RING

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In this final project, we discuss about almost prime ideal, almost primal ideal, and almost primary ideal in commutative ring with identity. An ideal I is called almost prime ideal of R if for $a, r \in R$, $ar \in I - I^2$ implies $a \in I$ or $r \in I$. Almost prime ideal is a generalization of prime ideal. Every prime ideal is almost prime ideal, but an almost prime ideal not always be prime ideal. An element $a \in R$ is called almost prime to I provided that $ra \in I - I^2$ (for any $r \in R$) implies that $r \in I$. So, An element $a \in R$ is called not almost prime to I provided that $ra \in I - I^2$ for some $r \in R - I$. The set of all elements of R that are not almost prime to I is denote by $A(I)$. Ideal I is called almost primal ideal of R if the set $A(I) \cup I^2$ forms an ideal of R.