

International J. of Math. Sci. & Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 5 No. III (May, 2011), pp. 117-121

TRIPLE DERIVATIONS OF SEMIPRIME RINGS

K. SUVARNA AND D. S. IRFANA

Abstract

In this paper, we prove that if d is a Jordan derivation of a semiprime ring R , then d is a quarter derivation. Using this, we show that d is a triple derivation. Also we prove that if R is a semiprime ring of char. $\neq 2$ and d acts as a homomorphism on R , then d is a central derivation.

Key Words : *Derivation, Triple derivation, Quarter derivation, Jordan derivation, Central derivation and Characteristic.*

©Ascent Publication House: [http:// www.ascent-journals.com](http://www.ascent-journals.com)