International J. of Math. Sci. & Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 5 No. VI (November, 2011), pp. 109-114

SECRET SHARING METHODS BASED ON N-BASED CANONICAL NUMBER SYSTEM

B. KRISHNA GANDHI[1] AND S. SRI LAKSHMI[2]

[1] Vice Chancellor and Professor of Mathematics,
J.N.T. University, Anantapur, A.P., India
[2]Lecturer in Mathematics,
J. N. T. University College of Engineering,Anantapur, A.P., India

Abstract

A secret sharing scheme is a method of distributing a message in parts among participants, each of which is allocated a share of the message. The message can be accessed completely only when the group of participants comes together, thus ensuring the safety of the message. We have been using one radix to represent the number system. Recently N-Based Number System ($N-BNS$) is being applied in cryptography. In $N-BNS$ numbers are represented as sum of the product of powers N prime numbers, called N-radices. In the present paper, new secret sharing schemes are proposed using $N-BNS$.

Key Words : N- *Based Number System, Radix, Cryptography.*