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RIPIC BASED KEY EXCHANGE PROTOCOL

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ABSTRACT. In this article, we intend to bring out a unique system of designing key exchange protocol (KEP) based on isomathematics. The significant concept of our proposal is to use ring isopolynomials with the usage of general isointegral coefficient. This class of KEP is an interesting asset for further study because of isomathematical structure permutable permutation of ring isopolynomials with isointeger coefficient (RIPIC).

1. Introduction

A KEP is a key formation technique where a common secret key is determined by more than two users as a component of data deliberated by, or connected with each of these users, in an ideal situation in such a way that no user can foreordain the subsequent value [1, 2]. In a symmetric key cryptography based protocols, two conveying users use a commonly identified algorithm and a secret key that is shared by the users. Secret key exchange can be made possible by employing few ways like- utilizing out-of-band correspondence, (for example, by telephone, via mail, manual entry etc.), utilizing a trusted third party key distribution center, and so forth. The greater parts of these techniques require approximately from the earlier secret key creation between the protocol and single users. Secret key

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