

**A CRYPTOGRAPHIC SCHEME WITH LAPLACE-CARSON
TRANSFORM AND SANDIP'S METHOD**

Sandip M. Sonawane and S. B. Kiwne*

Department of Mathematics,
SRES's Sanjivani COE, Kopergaon, Maharashtra, INDIA

E-mail : smsmathscoe@gmail.com

*Department of Mathematics,
Deogiri College, Aurangabad, Maharashtra, INDIA

(Received: Jul. 05, 2021 Accepted: Feb. 07, 2022 Published: Apr. 30, 2022)

Abstract: In this paper, authors have used Laplace-Carson transform of exponential, hyperbolic and algebraic functions and their various combinations for Cryptography with Sandip's method. Sandip's method is the procedure given to Encryption and Decryption of message. In Sandip's method two keys are provided that gives high security to the message. Various examples with different values of variables are given to show applicability of Laplace-Carson transform with Sandip's method.

Keywords and Phrases: Mahgoub Transform, Laplace-Carson transform, Cryptography, Laplace transform, Sandip transform.

2020 Mathematics Subject Classification: 94A60, 44A15, 11T71.

1. Introduction

Now a days the world has accepted digitalization in all sectors like banking, digital payments, google account etc. everywhere it is in need to secure our transaction or data (information). Cryptography is most widely technique used to secure our data. It passes our message to the receiver and third person do not understand it. G. Naga Laxmmi, et.al [10] gave Cryptography scheme with Laplace transform of exponential function. A. Hiwarekar [5-6] generalized the concept with hyperbolic function. A. Chinde [1] uses Natural transform with hyperbolic function to write message in cipher text. The integral transform method is widely used in