



तेजपुर विश्वविद्यालय

(केंद्रीय विश्वविद्यालय)

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TEZPUR UNIVERSITY

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Napam, Tezpur - 784 028, Assam, India

Department of Mathematical Sciences

Report on research collaboration

between

Dr. Pankaj Kumar Das, Department of Mathematical Sciences, Tezpur University

and

Mr. Subodh Kumar, Department of Mathematics, Shyam Lal College, University of Delhi

Title of collaboration:

Correcting key errors blockwise and correcting low density key errors

Summary of collaboration:

A collaborative research work was undertaken by Dr. Pankaj Kumar Das and Mr. Subodh Kumar with the aim to study the lower and upper bounds on check symbols needed to a linear code correcting key errors of length up to p which are confined to a single sub-block. It also derives similar bounds for the case when key error occurs in the whole code length, but the number of disturbing components within key error is up to a certain number. Examples also are provided.

Duration of collaboration:

The collaboration started in the month **June, 2019** and culminated in the form of a published research paper in the month of **June, 2020**.

Details of collaboration:

Details of collaboration could be found in the article-

Correcting key errors blockwise and correcting low density key errors, **Int. J. Math. Eng. Manag. Sci.**, 5 (2020), no. 6, 1234-1248, DOI: 10.33889/IJMEMS.2020.5.6.092.



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