



Research Profile of Mathematics Department:

One can only appreciate the art of Applied Science when he knows the art of synchronizing the Basic Science with it to have a desired casting. The young and the experienced faculty members of our Mathematics Department are doing this job with indefatigable energy to strengthen the theoretical background of our budding engineers so as to create interest about their core subjects.

Publications:

1. "A Study of Monsoon Rainfall In West Bengal and Orissa During 1871 – 2005", **Nilanjan De**, Ramaprosad Bondyopadhya, *Proceedings of 15th National Space Science Symposium (NSSS)-2008, Feb. 2008, pp. 26-29.*
2. "A Characterization of Relation using Digraphs", **Nilanjan De**, *Proceeding of National Seminar on Mathematics Education and Research in India (NSMER-2008)*".
3. "On Distribution Pattern of Monsoon Rainfall over West Bengal and Orissa during 1871-2005", **Nilanjan De**, Ramaprosad Bondhopadhya, *Proceedings of Natrional Conference on Integrated Water and Wastewater Management (NCIWWM-2008)*", Nov. 2008.
4. "Study of Financial Time Series: Using Exponential Smoothing Techniques", **Nilanjan De, Niloy Majumdar**, *Proceedings of National Financial Markets in India, Dec. 2008.*
5. "On Forest of K m-ary Tress", **Nilanjan De**, *Proceedings of National Seminar on Emarging Areas in Mathematics and Applications (NSEAMA-2009), Feb 2009.*
6. "Empowerment of Rural Artisans by Application of Computer Aided Design (CAD)", **Nilanjan De et. al**, *Proceedings of West Bengal State Science and Technology Congress and Technology Department, Feb. 2009.*

Books Published:

From Mr. Arnab Sikdar (Published under the banner of Kalyani Publishers and co-authored by N. K. Nag)

1. Mathematics (for BCA, 1st Semester, W. B. U.T) , ISBN 978-81-272-4653-2
2. Mathematics (for BCA, 2nd Semester, W. B. U.T) , ISBN 978-81-272-5077-5
3. Mathematics (for BCA, 3rd Semester, W. B. U.T) , ISBN 978-81-272-4764-5
4. Mathematics (for BCA, 4th Semester, W. B. U.T) , ISBN 978-81-272-5091-1

From Mr. Swapnateet Saha (Published by Jha Publication)

1. Higher Secondary Business Mathematics

Area of Research Interest of the Faculty Members of the Department:

The following are the thrust areas where the Department is working currently:

- ✚ Bayesian dynamic modelling, Box-Jenkins Modelling approaches for meteorological time-series analysis and forecasting. Modelling of Indian summer monsoon rainfall at different spatio-temporal scales.
- ✚ Algebraic Graph Theory and its application.
- ✚ Mathematical modeling of Renewable Energy Systems.
- ✚ Particle Physics
- ✚ Galactic & Extra-Galactic Astrophysics
- ✚ Complex Analysis, Functional Analysis
- ✚ Theoretical Computer Science
- ✚ Bio Mathematics
- ✚ Topological Structures
- ✚ Quantum Computing
- ✚ Genetic Algorithm