Programme outcome

DEPARTMENT OF MATHEMATICS

Session: July,2024 – June,2025

Title of the Programme   : Seminar on "Algebraic Structures and Mathematical Modelling"

Date of Programme   : 19.02.2025

Introduction   : The **Seminar on Algebraic Structure and Mathematical Modelling**, held on **February 19, 2025**, at the **Department of Mathematics, Barasat Government College**, aimed to provide students with valuable insights into the practical applications of mathematical concepts. The event featured engaging lectures by esteemed speakers, highlighting the role of mathematics in diverse fields such as **ecology and number theory**. Through interactive discussions and real-world examples, the seminar encouraged students to explore the depth of mathematical research and its relevance in solving complex problems.

Brief report on the programme (Different achievements and benefits of the programme):

The seminar on *Algebraic Structure and Mathematical Modelling*, held on **19.02.2025** at the **Department of Mathematics, Barasat Government College**, provided an enriching academic experience for students, offering deep insights into the real-world applications of mathematical concepts.

Sri Indrajyoti Gaine, Senior Research Fellow, IIT Kanpur, delivered an engaging lecture on the application of **Ordinary Differential Equations (ODEs) and Partial Differential Equations (PDEs) in Ecology**. He highlighted the importance of predator-prey interactions in ecological systems and how mathematical models can predict population dynamics. ODE models describe changes over time, while PDE models incorporate spatial variations. His talk demonstrated how these frameworks help analyze ecological patterns and improve management strategies. Students actively participated in discussions, enhancing their understanding of **spatial and temporal interactions** among species.

Dr. Jyotirmoy Pramanik, Assistant Professor of Taki Govt. College, introduced students to the fascinating world of **number systems**, shedding light on the seemingly unpredictable behavior of numbers. Through various intriguing examples, he explained that while numbers may appear well-structured, they possess hidden complexities. He specifically focused on the **distribution of prime numbers**, an area still rich with unsolved mysteries. His lecture sparked curiosity among students and encouraged them to explore the **vast research potential in number theory**.

The seminar fostered **critical thinking, intellectual curiosity, and research motivation** among students. It provided them with a broader perspective on the applications of **algebraic structures and mathematical modelling**, reinforcing their appreciation for the depth and scope of mathematical research.

Video link (youtube): **https://www.youtube.com/watch?v=HWvIMpOwH4g**

Text file link in college portal (Flyers/report etc): https://bgc.ac.in/pdf/webinar/seminar_math_modeling.pdf

Attach image files (Flyers, Geotag Images of the programme)

BARASAT GOVT. COLLEGE
DEPT. OF MATHEMATICS
Certificate of Appreciation
This certificate is proudly awarded to
Sri Indrajyoti Gaine
to certify that Sri Indrajyoti Gaine, Honourable Ph.D
IIT Kanpur has delivered an insightful lecture on
"Application of Mathematics in Ecology"
zed by the Department of Mathematics on 19th Februa
e sincerely appreciate his valuable contribution and efforts in enrichi
the knowledge of our students and faculty.

Principal
Barasat Govt. College

Head, Dept. of Mathematics
Barasat Govt. College

BARASAT GOVT. COLLEGE
DEPT. OF MATHEMATICS
Certificate of Appreciation
This certificate is proudly awarded to
Dr. Jyotirmoy Pramanik
is is to certify that Dr. Jyotirmoy Pramanik, Asst. pro
aki Govt. College has delivered an insightful lecture
"Are Numbers Well behaved?"
Organized by the Department of Mathematics
on 19th February, 2025(Total Duration 5 hours).
e sincerely appreciate his valuable contribution and efforts in enrich
the knowledge of our students and faculty.

Principal
Barasat Govt. College

Head, Dept. of Mathematics
Barasat Govt. College

Kolkata, West Bengal, India
23, Ashutosh Ghosh Rd, Gupta Colony, Barasat,
Kolkata, West Bengal 700124, India
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23, Ashutosh Ghosh Rd, Gupta Colony, Barasat,
Kolkata, West Bengal 700124, India
Lat 22.716651° Long 88.480964°
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ONE DAY DEPARTMENTAL SEMINAR
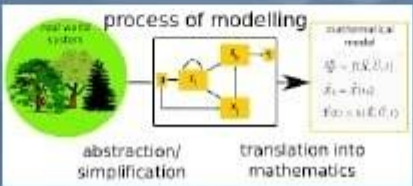ON
"ALGEBRAIC STRUCTURE AND MATHEMATICAL MODELLING"

Organized by

Department of Mathematics
Barasat Govt. College
In Collaboration with IQAC.

Time: 12PM   Venue: Seminar Room   Date: 19.02.2

Resource Persons

Mr. Indrajyoti Gaine
Ph.D. Scholar
IIT Kanpur, India

Dr. Jyotirmoy Praman
Asst. Professor
Taki Govt. College
West Bengal

process of modelling

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