Two Day National Seminar

On

"Mathematical Modeling and its Application to Epidemiology" (NSMMAE-2022)



Organized by:

Department of Mathematics, Bangabasi Evening College, 19, Rajkumar Chakraborty Sarani Kolkata-700009, West Bengal Website: www.bangabasievening.edu.in

Sponsored by:

Department of Science & Technology and Biotechnology(DSTBT), Govt. of West Bengal Vigyan Chetana Bhavan, DD-26/B, Sector-I, Salt Lake, Kolkata-700 064

Venue: Bangabasi Evening College, Kolkata

Date: 10-11 November, 2022 (Thursday & Friday)

About the Seminar: With the development of human life, different kinds of deadly public health diseases are attacking the human population around the globe. Epidemiology is the study on analysis of different patterns, causes and effects of such diseases by identifying the various risk factors and suggesting some measures of control. These diseases cause several thousands of deaths due to their unknown behavior and due to lack of appropriate control strategies. For, this reason, the study is necessary to explore the actual dynamics of these diseases. Since 1760, extensive research have been performed using mathematical modelling. But still there exists some other aspects which are yet to be unveiled in epidemiology. Therefore, our main objective is to investigate different epidemiological models considering the influence of different factors on the system.

According to WHO, public health refers to all organized measures to prevent disease, promote health and prolong life among the population as a whole. In very recent time several kinds of epidemic diseases have become most worrisome public health concerns. Due to this reason a large number of people all over the world have shown great interest in generating new outcomes not only in the field of medical science but also in bio-medical engineering epidemiology, mathematical modelling, etc. Now a days, mathematics and epidemiology have a synergetic relationship. In this Seminar we aim to analyze mathematical models on different types of important epidemic disease & health problems.

The main objective of this seminar is to bring together senior & young researchers in the area of Mathematics & Epidemiology to exchange their views and come up with new ideas. Another objective is to motivate our PG students so that they may pursue research in this area in near future.

About the College: Principal Prasanta Kumar Bose, the illustrious and worthy son of Acharya Girish Chandra Bose, founder of Bangabasi College, an eminent educationist of Bengal, founded the evening section of the Bangabasi College for the needy employed students in 1940 to teach Commerce. In 1944 Principal Bose opened up the Arts and Science faculties in the evening. Finally employed women were also enrolled as students by Principal Bose. Through the introduction of the Phase Reduction Scheme of the University Grants Commission, Bangabasi Evening College came into a separate existence on 11 April 1965, under the guidance and direction of Principal Prasanta Kumar Bose.

Since its inception, Bangabasi Evening College has embarked on the task of instilling a value-based nationalistic knowledge base along with scientific understanding disseminating knowledge in society by this holistic and futuristic model of education as conceived by its illustrious founder.

It is a great pleasure to announce that Bangabasi Evening College has opened Post Graduate Department of Mathematics from 2015-2016 Session with intake capacity 26. The College's mission is to provide students and faculty with an open environment that fosters professional and personal growth.

Distinguished Resource Persons

- 1. Professor Dilip Kumar Ganguly, Department of Mathematics, University of Calcutta.
- 2. Prof. Manjusha Majumdar, Department of Mathematics, University of Calcutta, Kolkata, WB.
- 3. Amiya Kumar Kalidaha, Senior Scientific Officer, DSTBT, Govt. of West Bengal
- 4. Dr. Malay Banerjee, Professor, Department of Mathematics and Statistics, IIT Kanpur
- 5. Dr. Santanu Saha Roy, Professor of Mathematics, National Institute of Technology, Rourkela
- 6. Prof. Prakash Chandra Mali, Department of Mathematics, Jadavpur University, Kolkata, WB.
- 7. Dr. Sabyasachi Bhattacharya, Professor Agricultural and Ecological Research Unit, Kolkata Biological Sciences Division Kolkata, ISI.
- 8. Prof. Joydev Chattopadhyay, Professor, Department of Mathematics, ISI, Kolkata.
- 9. Prof. Sujit Kumar Sardar, Department of Mathematics, Jadavpur University, Kolkata, WB.

- 10. Dr. Shariful Alam, Department of Mathematics, IIEST, Shibpur
- 11. Dr. Sankar Prasad Mondal, Professor Department of Applied Mathematics, MAKAUT
- 12. Dr. Animesh Mahata, Mahadevnagar High School, Maheshtala, Kolkata-700141, West Bengal, India.
- 13. Prof. Manik Chandra Mukherjee, Dept. of Mathematics, Bangabasi Evening College, CU, Kolkata, WB.
- 14. Dr. Supriya Mukherjee, Dept of Mathematics, Gurudas College, 1/1, Suren Sarkar Road, Kolkata-54, WB.

Call for Papers: The seminar invites papers on the following themes

Broad Themes: Popular and Basic Sciences; Earth Sciences; Social Sciences; Science Teaching Pedagogies

Sub Themes:

- Mathematical Biology
- Applied Mathematics
- Advanced Complex Analysis
- Dynamical systems
- Sustainable Development
- Stability and bifurcation theory
- Ecological Statistics
- Epidemiology

- Differential Equation and Fuzzy Sets theory
- General Topology
- Ecological Modeling
- Population dynamics
- Modeling and control of epidemiological problems
- Growth Curve Model
- Deterministic and Stochastic modelling on ecology
- Eco-epidemiology Teaching Pedagogy

Abstract Submission Guidelines: Well composed original research papers are invited from academicians and research scholars working and interested in the relevant field. Coauthors are required to pay registration charges separately. Research papers shall be subject to the approval of a peer review group for inclusion in the seminar proceedings. All research papers shall be subject to scrutiny of anti-plagiarism. Selected papers will be published in an edited book with ISBN and will be distributed to all registered authors, co-authors and resource persons.

Guidelines for Submission of Papers: Participants who intend to present their research papers in the seminar are required to submit the abstract along with the full manuscript of their work before 5th November 2022. It must be typed in Times New Roman Font Size 12 on A4 size paper with 1 inch margin on all sides and 1.5 line spacing. Footnotes should follow uniform style of citation. Papers should be submitted and all correspondence concerning submission must be sent by email along with a soft copy (MS word format) of filled up Registration form to bec.naac2015@gmail.com.

Registration Fees:

- Faculties: Rs. 1200/-
- Research Scholars: Rs. 1000/-
- UG & PG Students: Rs. 600/-
- Registration without Paper Presentation: Rs. 500/- (for All)
- Spot Registration Fee: Rs. 1500/- (for All)

The Registration fee is non-refundable.

The scanned copy of the registration form (proforma given in the next page) duly filled in all respects is to be sent to the email id bec.naac2015@gmail.com compulsorily within 5th November, 2022 after online payment to the college account mentioned below:

Details of Payments:

Beneficiary Name: BANGABASI EVENING COLLEGE M SC MATHEMATICS

Name of the Bank: STATE BANK OF INDIA Branch: SASHI BHUSAN DEYSTREET (CAL)

A/C No. 34957991228 IFSC Code: SBIN0005768 MICR: 700002089

Please bring the printed receipt copy of online payment on the Day-1 of the Seminar. Accommodation will not be provided by the organizers. However, information on list of hotels/lodging houses nearby may be obtained contacting the convener/Co-conveners.

Important Dates

Last Date of submission of Abstract: 5th November, 2022

Notification of Acceptance of Abstract: Within 8th November, 2022

Last Date of Registration: 8th November, 2022 Dates of Seminar: 10-11 November, 2022

Organizing Core Committee

Chief Patron : Sri. Ashok Kumar Deb

President, G. B Bangabasi Evening College

Chairman : Dr. Sanjib Chattopadhyay

Principal, Bangabasi Evening College

Convenor : Dr. Banamali Roy (Mob 9239031580)

Assistant Professor, Dept. Of Mathematics,

Bangabasi Evening College

Jt. Convenor : Dr. Sagarmoy Bag (Mob 9875368133)

SACT Faculty, Dept. Of Mathematics,

Bangabasi Evening College

Secretary : Mr. Surya Bahadur Subba,

HOD, Dept. Of Mathematics, Bangabasi Evening College

Jt. Secretary : Dr. Sudip Mazumdar & Mr. Achintya Singha

SACT Faculty, Dept. Of Mathematics, Bangabasi Evening College

Treasurer : Dr. Mahendra Rong

Associate Professor, Dept. Of Mathematics,

Bangabasi Evening College

Members : All Teaching Staff

Bangabasi Evening College

For queries, write to: bec.naac2015@gmail.com
Contact No: 9239031580, 9875368133

Registration Form Two Day National Seminar

On

"Mathematical Modeling and its Application to Epidemiology (NSMMAE-2022)"

10-11 November, 2022 (Sponsored by **DSTBT, Govt. of West Bengal)**

Organized by

Department of Mathematics, Bangabasi Evening College, Kolkata

Name:		
Designation:		
Name of the Institution:		
Address:		
Pir	1	
Phone No	E-mail Id	
Mode of Participation: Paper presentation	Poster Presentation	Only Participation
Title of the Paper		
Under Thrust Area		
Do you want to submit full paper for publication in Edited and Reviewed Book with ISBN? Yes/No		
Accommodation required (For Out- station delegates/ Paper presenters only) - Yes/No		
If yes, expected Date and Time of arrival and o	leparture:	
Food Preference: Veg/ Non Veg		
Payment Details and mode of payment		
Date		
Date:		
Place:	Signature	