

Newsletter

Department of Zoology

Academic session 2020-21

Seminar

1. Seminar on World Environment Day, Start Today, Save tomorrow: An initiative of P.G. Dept. of Zoology

<https://www.youtube.com/watch?v=hKE3mqX2GTw>

2. Seminar on World Zoonoses Day: An awareness initiative by Dept of Zoology

World Zoonoses Day is a global awareness day held every 6 July, the anniversary of the day in 1885 when Louise Pasteur successfully administered the first vaccine against rabies. In 2021, it comes once again in the midst of the SARS-CoV-2 (COVID-19) pandemic, a disease of zoonotic (animal) origin. Our Students, BSc Hons SEM-II, Department of Zoology, aim to boost up the level of knowledge and of awareness about the several important zoonotic diseases.

<http://bgc.ac.in/news/newsdetail.php?action=detail&tab=1&%20%20eventID=%20947>

3. An awareness initiative: A special talk on Visualising the Corona Virus by Monami Biswas, the first plasma doner of West Bengal

<http://bgc.ac.in/news/newsdetail.php?action=detail&tab=1&%20%20eventID=%20556>

Academic session 2021-22

Excursion

Visit to Science City, Kolkata

Barasat Govt. College, Zoology had organized a One Day Science City Education Tour for the B.Sc. Hons. 2nd Semester and 4th Semester students on 25 March, 2022. The trip to science city was a wonderful experience with full of knowledge of Science, Mathematics, Physics, and particularly Biological and much more, making science simple and interesting. It was just a Complete and Knowledgeable trip. In this visit, around 50 students visited Science City along with six (6) faculties of our departments.



FIG: Visited Science city, Kolkata for an educational excursion with the students of the B.Sc. 4 sem and 6 sem (Hons) CBCS Zoology (Total No. 32) on 25 March, 2022



FIG: Visited Science City, Kolkata with UG, PG students in connection with celebration of World Environment Day on 5th June, 2022, to be held at Science City auditorium, Kolkata, by West Bengal Pollution Control Board

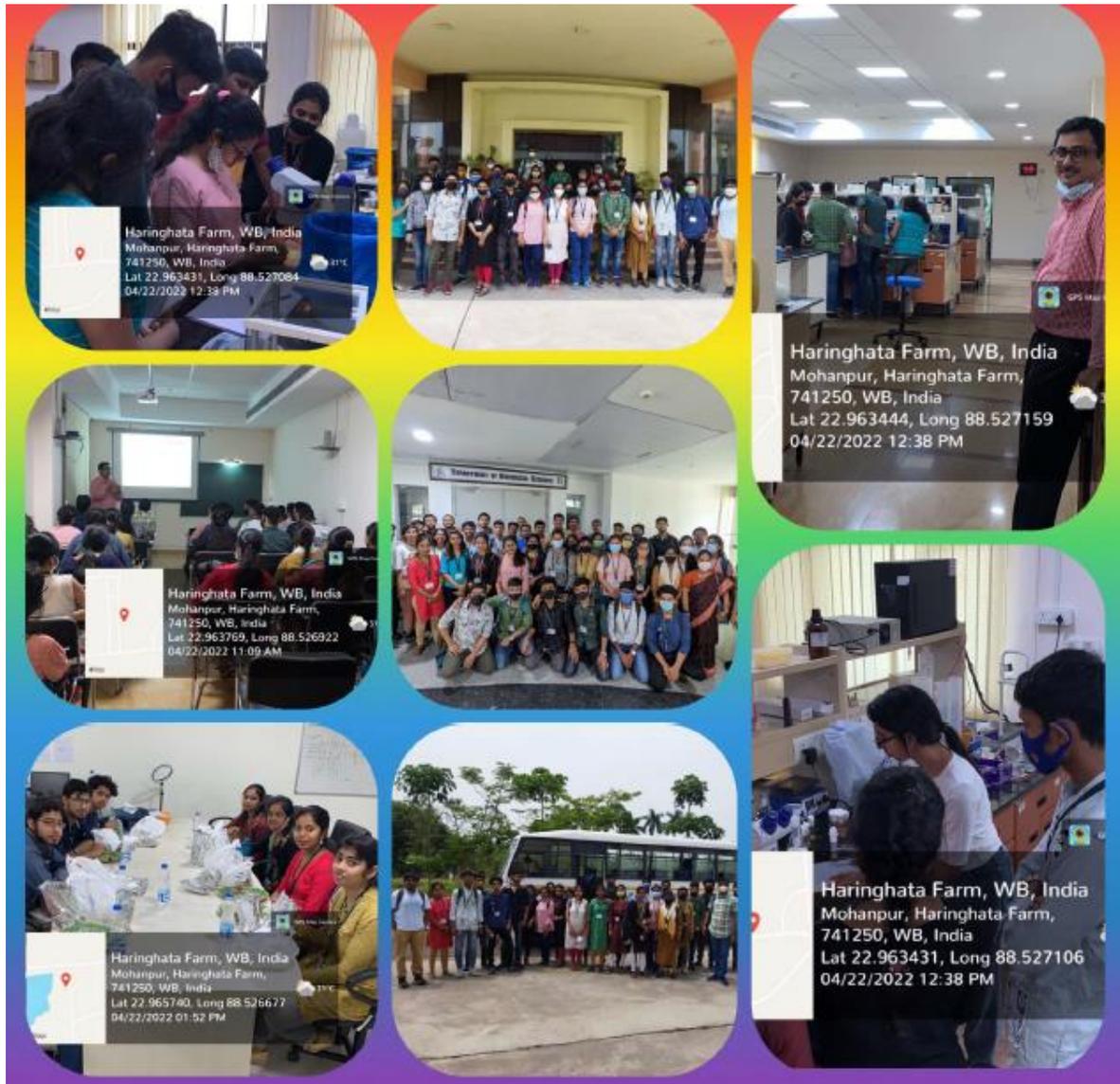
Visit to Chintamani Kar Bird Sanctuary, Narendrapur



FIG: Visited Chintamani Kar Bird Sanctuary, Narendrapur, Kolkata for field trip with the students of the PG 4 sem (Total No. 11) on 27 May, 2022

Visit to IISER- K, Nadia

Indian Institute of Science Education and Research Kolkata (IISER-K or IISER Kolkata) is an autonomous [public university](#) in science and education field located in Mohanpur near the town of [Kalyani](#) in [Nadia district, West Bengal](#), India. Barasat Govt. College, Zoology had organized a One Day Science City Education Tour for the M.Sc. 2nd Semester students to visit the research laboratories related to *Drosophila* developmental biology and genetics (PI: [Mohit Prasad](#), Professor, Department of Biological Sciences) on 22.04.2022. We have got the opportunities to hear a lecture from Dr. Prasad and to study the handling of *Drosophila*, identification of mutants and their genetic crosses.



**Visit to Dept. of Clinical Immunology & Rheumatology,
IPGMER & SSKM Hospital, Kolkata**

The M.Sc. students of Sem IV (No.-18; Special paper- Parasitology and Immunobiology have visited the research laboratories (Dept. of Clinical Immunology & Rheumatology, IPGMER & SSKM Hospital, Kolkata) related to immunology to partially fulfil the CBCS syllabus accompanied by two of our Faculty Members (Dr. Srikanta Guria and Dr. Somaditya Dey) on 28.04.2022. This program allowed the students to acquire knowledge and hands on training on flow cytometry, DNA/RNA isolation, RT-PCR, Immunofluorescence, and ELISA etc.





FIG: Lab visit to Dept. Of Clinical Immunology and Rheumatology of IPGMER, SSKM hospital with M.Sc. sem 4 students on 28.04.2022

Visit to Institute of Genetic Engineering, BADU, Kolkata

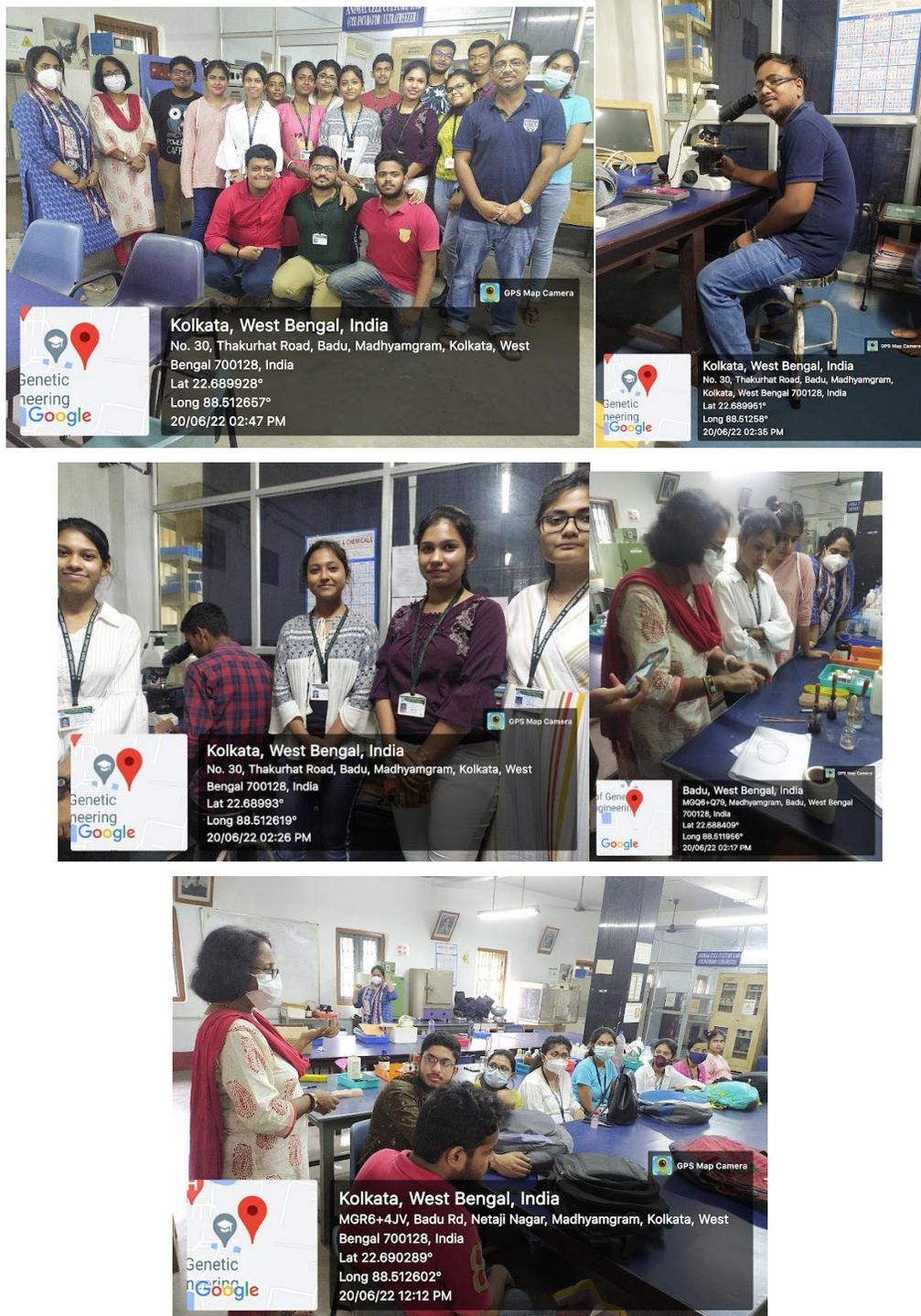
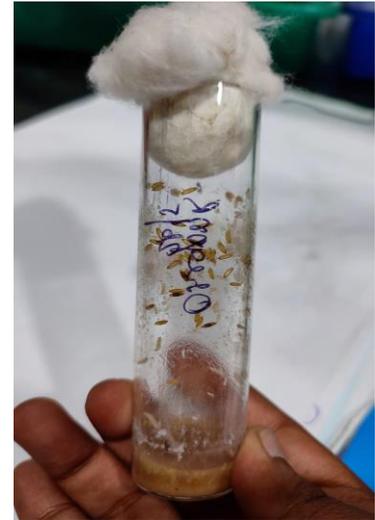


FIG: Visited Institute of Genetic Engineering, BADU, Kolkata for study of *Drosophila* culture, handling with the students of the UG Sem 6 (Total No. 17) on 20.6.2022

Different pictures related to the visit of Drosophila Genetics lab of Dept. of Zoology, University of Calcutta on 11.06.2022

The study of Drosophila in labs serves many purposes which include the understanding of developmental processes, mutational studies, gene regulation, and signaling.







Seminar on International Immunology Day 2022

Date of Programme : April 30, 2022

An academic Seminar (Offline) has been arranged by Department of Zoology, BGC to celebrate International Immunology Day 2022 (April 30, 2022). Speaker of the said seminar was Dr Syamdas Bandyopadhyay, Assistant Professor, Dept of Zoology, Burdwan Raj College. The seminar was a one & half hour long program being curated by PG Dept of Zoology, Barasat Govt. College, with an audience of about 100 participants (approx.), made up of undergraduate & postgraduate students, and faculties of our college. His discussion on “The Saga of CD1d”, was a great addition to our event.

Seminar related to Cd1 research work has increased research interest like CD1d-Expressing Cancer Cells, Cell-Mediated Immunity in a Murine Model.

https://bgc.ac.in/index.php?option=com_content&view=article&id=166&Itemid=0



Seminar on Neglected Tropical Disease Day

Date of Programme : 29/01/2022

To mark World Neglected Tropical Diseases Day (WNTDD), the World Health Organization (WHO) is calling on everyone, to rally to confront inequalities that characterize NTDs and ensure that the poorest and marginalized communities who are mostly affected by neglected tropical diseases (NTDs) receive the health services they need.

PG Dept. of Zoology has celebrated World NTD day. Students of UG and PG program has submitted posters, graphical artworks, and drawings to arrange an online awareness initiative on “Neglected Tropical Disease Day” (30/01/2022). They have also submitted brief talks or group discussions (5-6 minutes each). The themes of the presentations are vectors, modes of transmissions, impacts, implications, control, prevention, elimination and eradication of these diseases. A webinar has also been arranged by our department featuring the lecture of Dr. Madhumita Manna, WBSES, Additional Director of Public Instruction (Administration), Education Directorate, Department of Higher Education, Govt. of West Bengal, India on the theme ‘Beat NTDs. For Good. For All. Together, We Can Combat NTDs’ on 29 January 2022, 7 PM (IST).

This program will help for acquirement of knowledge in this Particular Field. It provided a chance to interact with experts from the specific field.

https://bgc.ac.in/index.php?option=com_content&view=article&id=166&Itemid=0

<https://www.youtube.com/watch?v=gM4gKGY1Oc4>

Seminar on “Celebrating 100 years of insulin discovery: advances and opportunities in diabetes research”

Date of Programme : November 26th, 2021

Zoology department has also arranged a national webinar on “Celebrating 100 years of insulin discovery: advances and opportunities in diabetes research” on November 26th, 2021. The speakers of the said webinar were Dr. Anirban Sinha, Assistant Professor, Department of Endocrinology, Medical College, Kolkata (Topic: Recent Advances In Insulin And Delivery Technology In Diabetes) and Dr. Partha Chakrabarti, Principal Scientist, Cell Biology & Physiology CSIR-IICB, Kolkata (Topic: Insulin And Indian Diabetes: Ideas And Experiments).

This program will help for Acquirement of Knowledge in this Particular Field. It provided a chance to interact with experts from the specific field.

https://bgc.ac.in/index.php?option=com_content&view=article&id=166&Itemid=0

Seminar on International webinar on comprehensive current approaches to oncogenetics & pollination ecology

Date of Programme : October 1, 2021

International Webinar on International webinar on, comprehensive current approaches to oncogenetics & pollination ecology has been arranged by Zoology Department on October 1, 2021 (registration last date September 27, 2021). The two young and energetic speakers were Dr. Sayan Chakraborty, who is now serving as a Research Assistant Professor & NMRC Young Investigator, Institute of Molecular & Cell Biology, A-STAR, Singapore and Dr. Priyadarshini Chakrabarti Basu, now serving as Assistant Professor, Pollinator Health & Apiculture, Department of Biochemistry, Molecular Biology, Entomology & Plant Pathology, Mississippi State University, USA.

YouTube: <https://youtu.be/GjTpS56dW3A>

https://bgc.ac.in/index.php?option=com_content&view=article&id=166&Itemid=0

Departmental Poster cum Slogan Competition 2022

for celebrating "World Bee Day 2022" - 20th May, "World Biodiversity Day" 2022- 22nd May and "World Environment Day" 2022- 5th June

Date of Programme : 27/05/2022

UG (Hons and General) and PG students of department of Zoology, BGC participated at departmental offline poster cum slogan competition to celebrate above mentioned days. They submitted Word-art; mandala Paintings, Photograph Collage, & Digital Artworks on these particular themes mentioned on 27/05/2022. The best/ selected posters have been displayed on departmental wall magazine.

https://bgc.ac.in/news/admin/uploads/a3f3d_Departmental-Poster-Competition-2022.pdf

Academic session 2022-23

Department of Zoology

https://bgc.ac.in/index.php?option=com_content&view=article&id=198&Itemid=0

<https://bgc.ac.in/pdf/activities/zoology/zoology%20field%20trip%20,%20excursion.lab%20visit%2022-23.pdf>

Department of Zoology conducted Educational excursion along with CBCS Sem 1 Under Graduate students (number=22) and 3 PG students to visit Bibhutibhusan Wildlife Sanctuary (formerly Parmadan Forest), North 24 Parganas district, WB, on 30.01.2023.





Quadrat study and sample collection and Pitfall study and sample collection and insect collection



FIG: Educational excursion along with CBCS Sem 1 Under Graduate students (number=22) and 3 PG students to visit Bibhutibhusan Wildlife Sanctuary (formerly Parmadan Forest), North 24 Parganas district, WB, on 30.01.2023

Visit to Vivekananda Institute of Biotechnology

Post Graduate Sem IV students of Zoology visited Vivekananda Institute of Biotechnology, Ramakrishna Mission Ashram, Nimpith, South 24 Parganas, and West Bengal on 10.04.2023 for studying the Biofertilizer Technology, Horticultural Biotechnology, Plant Tissue Culture, Mushroom Technology, bioenergy, vermicomposting process along with the teachers (Dr. Salil Kumar Gupta, Dr. Enamul Haque, Dr. Srikanta Guria and Mrs. Indrani Banerjee).



FIG: Visited to Research labs of Vivekananda Institute of Biotechnology, Nimpith Ramkrishna Asram on 10 th April, 2023 with M.Sc. Sem IV students (number=24)

Neem based pesticides are suitable for developing countries because the useful chemical can be extracted easily without any expensive equipment. The left over can improve soil and can be added as plant food. VIB promotes use extract from kernel, oil and cake.

Vermicomposting is the scientific method of making compost, by using of earthworms which are generally found living in soil, feeding on biomass and excreting it in a digested form. This compost is generally called Vermicompost or Wormicompost. It is a controlled degradation of the organic wastes for the consumption of earthworms, helps in the recycling of food wastes, reduces the waste bulk density and the final product may contain hormone-like substance which accelerates the plant growth.

Participation at State Level Seminar & poster presentation competition sponsored by Swami Vivekananda Research Centre (SVRC)

Our PG Zoology students of Sem IV with their teachers participated State Level Seminar & poster presentation competition sponsored by Swami Vivekananda Research Centre (SVRC) on Selection or Elimination! – Which one does a Virus offer? Organized by RKM Vidyamandira, Belur, Howrah on 12th April, 2023.

It helped in developing their soft skills, research ideas and helped to discover potential new analyses and perspectives to research work. Posters offered the opportunity to network and communicate with other attendees from related field, leading to collaborations. Our ex PG student also successfully presented his Ph.D. research work.



Visit to Department of Zoology, University of Calcutta

M.Sc. Semester-IV students (Elective: Parasitology & Immunology) along with Dr. Ivy Kundu and Dr. Srikanta Guria visited Immunology Lab of Professor Arindam Bhattacharyya and Genetics lab of professor Madhusudan Das, Department of Zoology, University of Calcutta on 26.04.2023 and found following process like Centrifugation, Polymerase Chain Reaction (PCR), SDS PAGE or Sodium Dodecyl Sulphate-Polyacrylamide Gel Electrophoresis, Agarose gel electrophoresis, Gel documentation systems, Flow Cytometry, FACS, Cell culture facilities and Histopathological analysis of tissues like histological alteration of rat spleen due to malaria infection.

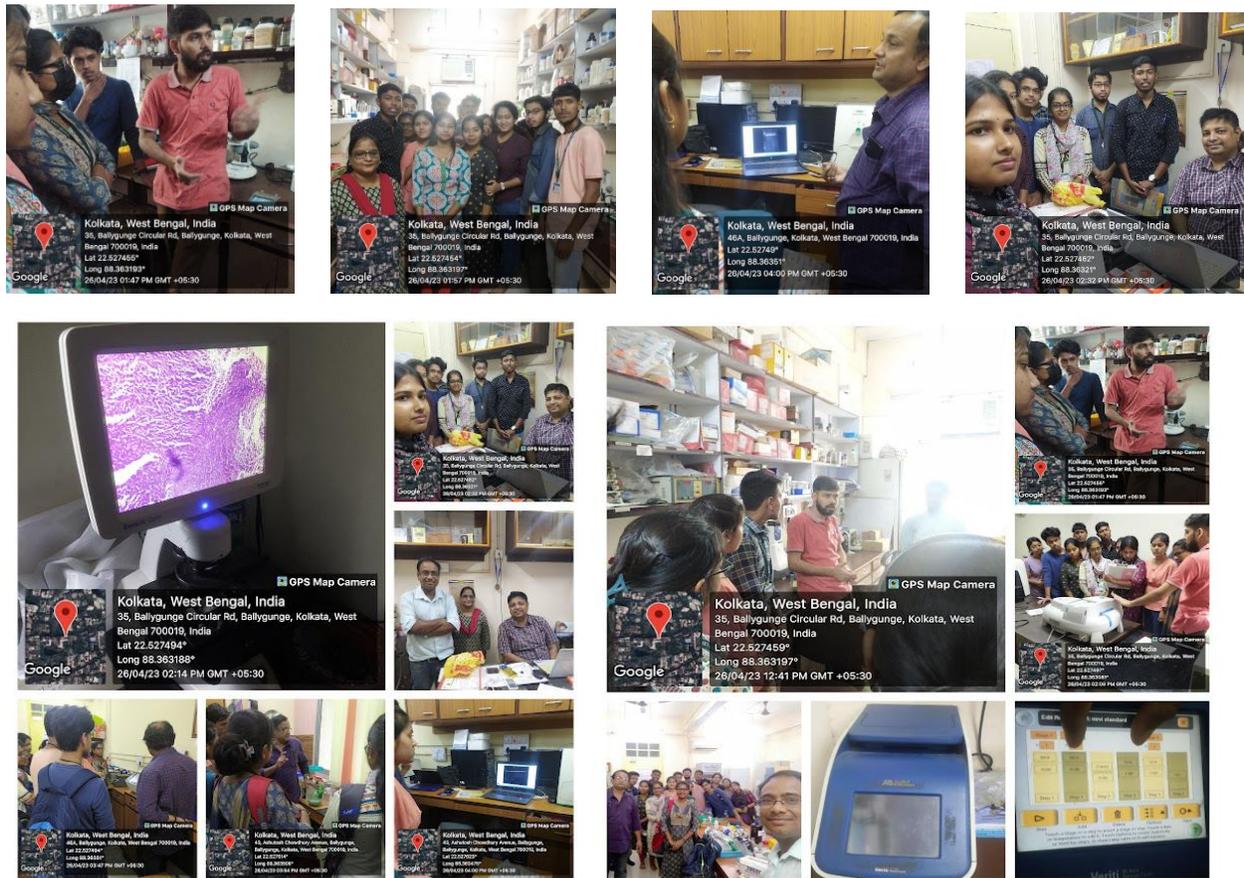


FIG: Visited to Immunology Research lab and Genetics lab of Dept. of Zoology, Calcutta University, Ballygunge circular road on 26th April, 2023 with M.Sc. Sem IV Parasitology and Immunology Special paper students. Total no=14

Excursion to Pench (MP) and Nagzira (Maharashtra)

Students of Department of Zoology visited Pench (MP) and Nagzira (Maharashtra) from 22.2.2023 to 27.2.2023 (number=26) for educational excursion. The main objective of conducting an Educational Excursion and field trip for students was to reinforce experiential and contextual learning. Further, department planned visits to various places to enrich the students and to take learning beyond the four walls of the classroom.



FIG: Educational excursion and field study to Pench (MP) and Nagzira (Maharashtra) with students of the Post Graduate Department of Zoology (number=26) of Barasat Govt. College from 22.2.2023 to 27.2.2023

Excursion to Murti, Gorumara National Park, Chapramari (Dooars)

Students of Department of Zoology visited Murti, Gorumara National Park, Chapramari (Dooars) and adjoining areas (West Bengal), North Bengal Wild Animal Park (Bengal Safari), Salugara and adjoining areas (West Bengal) for an educational excursion along with CBCS Sem 3 and 5 Under Graduate students (number=49) of Department of Zoology of this College. From 09.11.2022 to 13.11.2022. total participant=49.



Uttar Dhupjhora, West Bengal, India
PMGSY Rd, Uttar Dhupjhora, West Bengal
735206, India
Lat 26.836369°
Long 88.827471°
11/11/22 03:45 PM GMT +05:30



Murti, West Bengal, India
RRQF+RHJ, Murti, West Bengal 735206,
India
Lat 26.84013°
Long 88.823133°
10/11/22 12:02 PM GMT +05:30



Murti, West Bengal, India
RRQF+RHJ, Murti, West Bengal 735206,
India
Lat 26.839963°
Long 88.82324°
10/11/22 09:10 PM GMT +05:30



Murti, West Bengal, India
Bridge on Murti river, Uttar Dhupjhora Rd,
Murti, West Bengal 735206, India
Lat 26.84068°
Long 88.82896°
10/11/22 05:15 PM GMT +05:30



FIG: Visited Murti, Gorumara National Park, Chapramari (Dooars) and adjoining areas (West Bengal), North Bengal Wild Animal Park (Bengal Safari), Salugara and adjoining areas (West Bengal) for an educational excursion along with CBCS Sem 3 and 5 Under Graduate students (number=49) of Department of Zoology of this College. From 09.11.2022 to 13.11.2022.

Participation and Oral and poster presentation at conferences of ECPT/P-09/2023

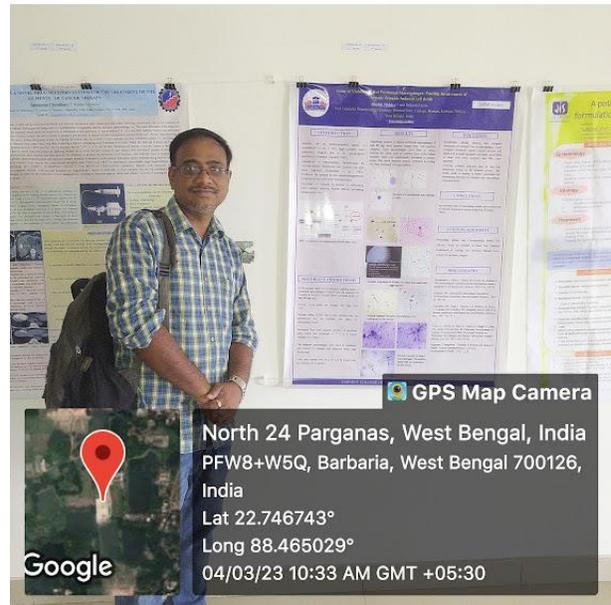
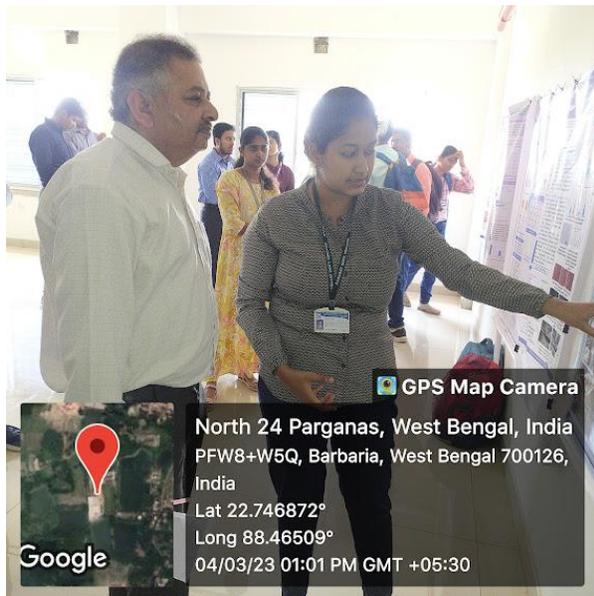


FIG: Oral and poster presentation at conferences of ECPT/P-09/2023 Eminent College of Pharmaceutical Technology Barasat, in association with Bioequivalence Study Centre Jadavpur University on 3rd & 4th March, 2023

Participation and Paper Presentation at Conference

One of the Teachers (SACT) & M.Sc. SEM-IV Student of Post Graduate Dept. of Zoology, Barasat Government College attended Two Day International Conference “Zoo-Spectra 2022” organized by Dept. of Zoology, University of Calcutta on 5th-6th December, 2022 & presented their Oral & Poster Presentation respectively.



FIG: Student and teachers presented their research papers at “Zoo-Spectra 2022”

M.Sc. Sem-IV Entomology & Ecology & Environmental Biology Special Paper students of Barasat Government College attended National Conference on “Climate Change Issues & Sustainable Development” jointly organized by Dept. of Zoology, A.P.C. College, New Barrackpore, Kolkata & International Academy of Science & Research (IASR), Kolkata in association with Global Warming Reduction Centre, Kolkata Chapter on 11-12 May 2023 At Acharya Prafulla Chandra College & presented their research papers successfully.



FIG: Students presented their research papers at Acharya Prafulla Chandra College

Participation in Bird Watching Workshop

Students of PG dept of Zoology, Barasat Govt College (CBCS MSc Sem IV students-Ecology special:05, Entamology special:04, Parasitology special:01) escorted by one faculty (Smt Indrani Banerjee) attended Migratory bird watching workshop at Santragachi jheel on 02.02.2023, organized by Ecology & Biodiversity Unit, Shibpur Dinobundhoo Institution College in collaboration with West Bengal Biodiversity Board. The workshop were focused on identifying lots of local and migratory birds as well as on the modern techniques and tools for identifying birds (using Spotting Scope ,binoculars, laser range finder).

সাঁতরাগাছি ঝিলে পরিযায়ী পাখি গণনা শিখলেন পড়ুয়া ও গবেষকরা

ত্রিযদর্শী বন্দোপাধ্যায়

পরিযায়ী পাখি গণনা হাতে-কলমে শেখানোর উদ্যোগ নিল শিবপুরে শীতলক্ষ্মী কলেজের ইকোলাজি ও বায়ো-ডাইভারসিটি ইউনিট এবং রাস্তা বায়ো-ডাইভারসিটি ফোর্ড। এই উপলক্ষে কৃষ্ণাঙ্গিণীর কলকাতা বিশ্ববিদ্যালয়ের বিভিন্ন কলেজের স্নাতক ও স্নাতকোত্তর স্তরের শতাধিক ছাত্র-ছাত্রী ও গবেষকদের নিয়ে

সাঁতরাগাছি ঝিলে কর্মশালা হয়ে গেল। এখানে শিবপুরে শীতলক্ষ্মী কলেজের প্রাণীবিদ্যার অধ্যাপক সত্যেন্দ্র মজুমদার, মহেশ্বর এজামুদ্দিন, স্ত্রীরামপুর কলেজের প্রাণীবিদ্যা বিভাগের অধ্যাপক শুভদীপ সরকার ছাত্র-ছাত্রীদের এই কর্মশালায় পরিযায়ী পাখিদের কিতাবে পানারী করতে হবে বা গুনতে বের। সেইসঙ্গে কী ধরনের প্রজাতির পরিযায়ী পাখি সাঁতরাগাছি ঝিলে এসেছে তাও যত্নে দেখেন তারা। সেইসঙ্গে নর্দান সিনাটেল জাতীয় ট্রিমালয়ান পরিযায়ী পাখি আসার সংখ্যা কেন কমান



পরিযায়ী পাখি পড়ুয়ারা। সাঁতরাগাছি ঝিলে। ছবি: আজকাল

পরিযায়ী পাখি সেনার পাঠও দেওয়া হয় এই কর্মশালায়। তাদের এই কর্মশালায় সহযোগী হিসেবে ছিলেন কলকাতা বিশ্ববিদ্যালয়ের দুই গবেষক অরুণা সরকার ও শৌভিক বারিক। ছিলেন পশ্চিমবঙ্গ বায়ো-ডাইভারসিটি বোর্ডের সিনিয়র রিসার্চ অফিসার ড. সৌমেন্দ্রনাথ ঘোষ, শিবপুরে শীতলক্ষ্মী কলেজের অধ্যাপক মণিধীপ চাট্টা-সহ আরও অনেকে। অধ্যাপক সত্যেন্দ্র মজুমদার বলেন, 'গত দু'শকের তুলনায় এবার সাঁতরাগাছি ঝিলে পরিযায়ী পাখির সংখ্যা অনেকটাই বেড়েছে। এ বানকায় পরিবেশ ও পরিকাঠামো পরিযায়ী পাখি আসার উপযুক্ত করে গড়ে তোলাতেই পরিযায়ী পাখি আসার সংখ্যা বেড়েছে। সরাসরি জাতীয় পরিযায়ী পাখি এবার পশ্চিম সংখ্যায় এসেছে। কিন্তু সাইবেরিয়ান পাখি বা



FIG: Participation in Bird Watching Workshop

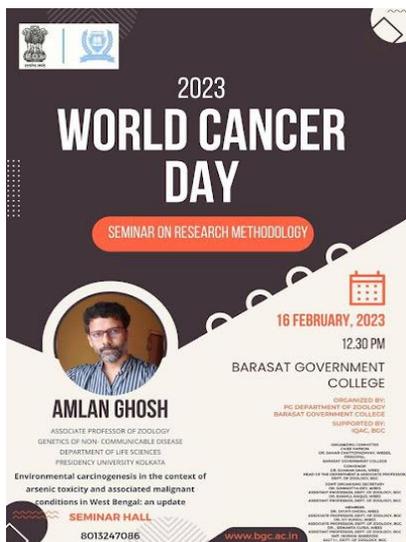
Seminar on research methodology organized by Dept. of Zoology to celebrate world cancer day

Date of Program :16.02.2023

Dr. Amlan Ghosh of Presedency University talked on Environmental carcinogenesis in the context of arsenic toxicity and associated malignant conditions in West Bengal: an update. World Cancer Day is a global healthcare event for the awareness of cancer, which has been commemorated on February 4th of every year for the past 23 years (since 2000) with the aim of spreading awareness and educating people about its detection, treatment, and prevention.

Number of Participants =58

https://bgc.ac.in/index.php?option=com_content&view=article&id=166&Itemid=0



Academic seminar on the research methodology related to field and laboratory environmental research, environmental sustainability on the occasion of World Environment Day organized by Dept. of Zoology

Date of Program: 16 June 2023

Dr. Priyanka Halder Mallick, Associate Professor, Department of Zoology, Vidyasagar University, Paschim Medinipur delivered her lecture on "Preserving Paradise: Ecotourism as a Catalyst for Environmental Sustainability and the SDGs".

Number of Participants =41

https://bgc.ac.in/index.php?option=com_content&view=article&id=166&Itemid=0





ACADEMIC SEMINAR On the research methodology related to field and laboratory environmental research, environmental sustainability on the occasion of World Environment Day

On 16 June 2023 from 12 PM at

Department of Zoology

ORGANIZED BY: POST GRADUATE DEPARTMENT OF ZOOLOGY BARASAT GOVERNMENT COLLEGE

SUPPORTED BY: IQAC, BGC

ORGANIZING COMMITTEE:

CHIEF PATRON: DR. SAMAR CHATTOPADHYAY VISES, Principal, Barasat Government College

CONVENOR: DR. SUMANA SAHA Head of the Department, Dept. of Zoology

JOINT ORGANISING SECRETARY: DR. ENAMUL HAQUE SMT. INDRANI BANERJEE

MEMBERS: DR. JAYATI GHOSH DR. IVY KUNDU DR. SRIKANTA GURIA

Dr. Priyanka Halder Mallick Associate Professor Department of Zoology Vidyasagar University Paschim Medinipur

"Preserving Paradise: Ecotourism as a Catalyst for Environmental Sustainability and the SDGs"

A little effort towards saving the environment is better than none at all.



Value added course

Value added course on A Complete Practical Guide Course on Human Blood Cell Count, Hemoglobin Estimation and Interpretation of Diseases (Duration= 1st February 2023 to 31st May 2023, Total=36 Hrs.)

Course Objective: To impart job oriented skill through hands on experience of **BLOOD CELL ANALYSIS.**

At the completion of the course the students were aware of the various human blood related diseases.

The hemoglobin concentration is always estimated as part of routine tests in outpatients department and also as a bedside test in indoor patients. It is indicated as part of complete hematological studies in all diseases of blood, especially all types of anemias, leukemias, and in chronic diseases such as tuberculosis, chronic infections, malignancies, renal failure, etc. Many hematological and other disorders can be

diagnosed by a careful examination of a stained blood film. A physician may order a differential leukocyte count (always along with TLC) to detect infection or inflammation, determine the effects of possible poisoning by chemicals, drugs, chemotherapy, radiation, etc.



FIG: Hands on training of students

GOVERNMENT OF WEST BENGAL
BARASAT GOVERNMENT COLLEGE
 NAAC ACREDITED 'A' GRADE & DST-FIST SPONSORED COLLEGE
 10, U.M.C. Road, Barasat, Kolkata - 700124, West Bengal, India
 Phone: (033) 2552 3365, Fax: (033) 2542 5053, E-Mail: principal@bgc.ac.in

POST GRADUATE DEPARTMENT OF ZOOLOGY

NOTICE

A value added course will be arranged for B.Sc. and M.Sc. Zoology students on and from 1st February 2023 to 31st May 2023 (Total 36 Hrs.) in the Department of ZOOLOGY.

COURSE TITLE: A Complete Practical Guide Course on Human Blood Cell Count, Haemoglobin Estimation and Interpretation of Diseases

Sumana Saha 19.1.2023
 Dr. Sumana Saha
 Head
 Post Graduate Dept. of Zoology


 Countersigned
 Principal
 Barasat Govt. College
 Barasat Government College

Barasat Government College
 Department of Zoology
 Session 2022-23

Value added course
 on

A Complete Practical Guide Course on Human Blood Cell Count, Hemoglobin Estimation and Interpretation of Diseases

(Duration- 1st February 2023 to 31st May 2023)
 Total-36 Hrs.

Course Objective:
 To impart job oriented skill through hands on experience of **BLOOD CELL ANALYSIS**

Course Coordinator
Dr. Enamul Haque

Add on course

Course Title: Collection, preservation, display and cataloging of museum specimens

Dates: 05.06.23, 07.06.23, 09.06.23, 12.06.23

The purpose was to record information and preserve specimens for taxonomic study. The course offered students the opportunity to develop an understanding of how museums function as sites of collecting, education, and research. The course focused on objects, collections, and their preservation or conservation method and student can gain first-hand experience working directly in the field.

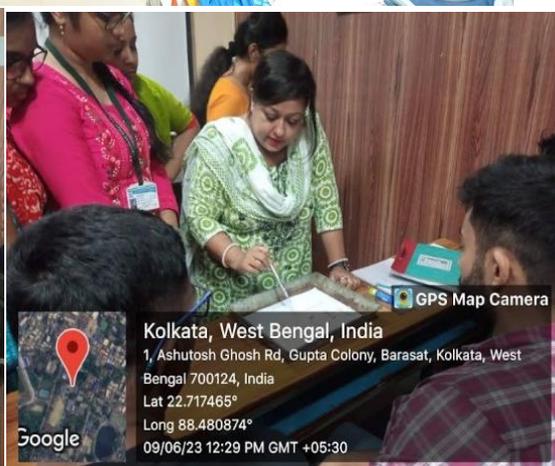
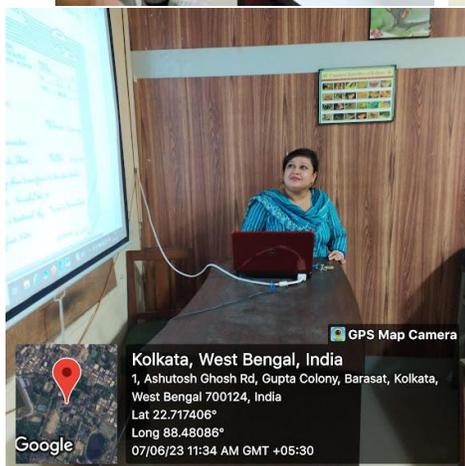


FIG: Add on course on Collection, preservation, display and cataloging of museum specimens