



S.B.S. Government College, Hili

Is cordially inviting you all for a Special Lecture on the topic **"Freshwater Pisciculture and Induced Breeding of Fish – a brief concept note"** jointly organized by **Department of Zoology in collaboration with I.Q.A.C.**

Date: 15th September; Venue: Smart Classroom-I, S.B.S. Government College, Hili

Chief Patron: Dr. Narbu Sherpa, Officer-In-Charge, SBSGCH

Convener: Dr. Dip Mukherjee, HoD & Assistant Professor, Department of Zoology, SBSGCH

Joint Convener: Dr. Kaustav Chakraborty, Assistant Professor, Department of Zoology, SBSGCH & Dr. Minu Bharati, Assistant Professor, Department of Zoology, SBSGCH

I.Q.A.C. Coordinator: Dr. Kaushik Maji, Assistant Professor, Department of Chemistry, SBSGCH

About the College:

The college started its academic journey from session 2015-16 with five humanities subjects (Bengali, English, Sanskrit, History and Philosophy) and 238 students in annex building of Ramanath High School, Hili till 11th March 2016. After that college has been shifted in its own building on and from 12th March 2016. B.Sc. (Hons) in Zoology started from the academic session 2016-17 with Botany and Chemistry as

elective subjects. The college is now temporarily affiliated under the University of Gour Banga.

About the Department:

The Department of Zoology is the only Department providing Honours course of study at present under the Science stream. It began its journey in the year 2016. Though the Department is in its early days, but it is striving to provide quality education to the students of this area who are mostly first-generation learners. The Departmental library is rich and is being updated with multiple copies of subject oriented books. The present course offers a comprehensive knowledge base in the various areas of non-chordates, chordates, ecology, biochemistry, genetics, cell & molecular biology, parasitology, immunology, etc. through class-room lectures, practicals and field work. The Department has a well-equipped laboratory with instruments like microscopes, centrifuge, pH meter, digital balance, etc.

Speaker: Mr. Subrato Ghosh, Assistant Fishery Officer, Directorate of Fisheries, Government of West Bengal



About the Speaker: Subrato Ghosh completed his MSc in Applied Aquaculture from Barkatullah University, Bhopal in 2003 securing first position in first class. He worked as Junior Research Fellow at Department of Fishery Pathology and Microbiology, WB

University of Animal and Fishery Sciences; as Senior Research Fellow both at ICAR-Central Institute of Freshwater Aquaculture, Bhubaneswar and ICAR-Central Inland Fisheries Research Institute, Barrackpore; as Part-time Lecturer in MSc Fishery and Aquaculture course at Department of Zoology, Utkal University, Bhubaneswar. He has participated in 6 State-level, 16 National and 3 International Conferences in India and presented scientific papers on freshwater aquaculture in all of them. He has authored 11 papers published in Aquaculture Asia, published by Network of Aquaculture Centres in Asia-Pacific, Thailand and in Journal of World Aquaculture Society, USA. He joined Directorate of Fisheries, Government of West Bengal as Fishery Field Assistant in January 2013 securing first position in merit list in WBPS exam and presently working as Fishery Extension Officer under this Directorate since June 2017.

Topic: "Freshwater pisciculture and induced breeding of fish – a brief concept note"

Abstract of the Topic:

Freshwater pisciculture vocation in medium and commercial scale contributes enormously to socio-economic development and prosperity in villages of West Bengal (WB), providing job opportunities in self-employment mode and protein food (fish) production & supply, also nutritional security. UG students having Zoology as Hons paper study the subject matter as a small part of syllabus (Applied Zoology/Economic Zoology).

Annual inland fish production in WB, presently 16.25 lakh tonnes, has to be enhanced to meet the demand from consumers. About 85% of this is produced from pisciculture ponds/large water bodies. Good quality seed (spawn/fry) of major carps and other economically-important freshwater fishes in adequate quantity is the primary requirement for successful grow-out pisciculture in village ponds and today the same is obtained from induced fish breeding practiced in commercial fish hatcheries in WB. Table-size major carps and catfishes sold presently in retail markets are produced in fish farmers' ponds beginning from stocking of induced-bred fish seeds. Discovery and standardization of this technology in late 1950s by Bengalee fishery scientist Late Dr Hiralal Chaudhuri is a significant achievement and landmark in the history of freshwater pisciculture in India.

The science of induced fish breeding in captive and controlled conditions by administration of piscine-origin GtH and GnRH, its background, involvement of endocrine hormones in fish reproductive physiology and the underlying phenomenon is an interesting aspect in ichthyology (fish biology), which is also a small part of Zoology Hons syllabus. In an audio-visual Presentation, the science, technology (application), significance and advancements of induced fish breeding in WB will be discussed in detail on 15/09/2022. Hard-working nature and pivotal contributions of Late Dr Chaudhuri will also be presented, it will have influence over UG students of Zoology, inspire them in academic endeavour and help them to gain scientific temper.