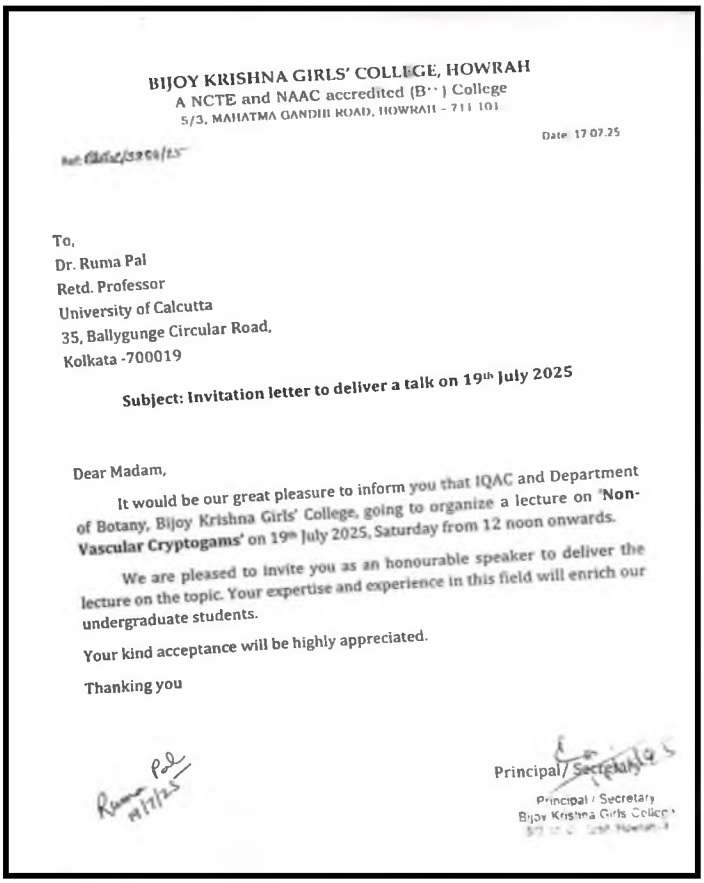
REPORT FOR IQAC, BKGC

DEPARTMENT OF BOTANY

Report on **A special lecture on Non-Vascular Cryptogams**

1. Workshop/Seminar/Conference/Invited or Extension Lecture: **Extension Lecture**
2. Online/Offline: **Offline**
3. Institutional/International/National/Regional: **Regional**
4. Title: **A special lecture on Non-Vascular Cryptogams**
5. Date: **19.07.2025**
6. Organizer(s): **IQAC, BKGC and Department of Botany**
7. Funding (with proof): NA
8. Collaborators (with proof): NA
9. Resource Persons (with invitation and acceptance letters): **Dr. Ruma Pal**



BIJOY KRISHNA GIRLS' COLLEGE, HOWRAH
A NCTE and NAAC accredited (B++) College
5/3, MAHATMA GANDHI ROAD, HOWRAH - 711 101

Date: 17.07.25

Ref: BKGC/2025/15

To,
Dr. Ruma Pal
Retd. Professor
University of Calcutta
35, Ballygunge Circular Road,
Kolkata -700019

Subject: Invitation letter to deliver a talk on 19th July 2025

Dear Madam,

It would be our great pleasure to inform you that IQAC and Department of Botany, Bijoy Krishna Girls' College, going to organize a lecture on **'Non-Vascular Cryptogams'** on 19th July 2025, Saturday from 12 noon onwards.

We are pleased to invite you as an honourable speaker to deliver the lecture on the topic. Your expertise and experience in this field will enrich our undergraduate students.

Your kind acceptance will be highly appreciated.

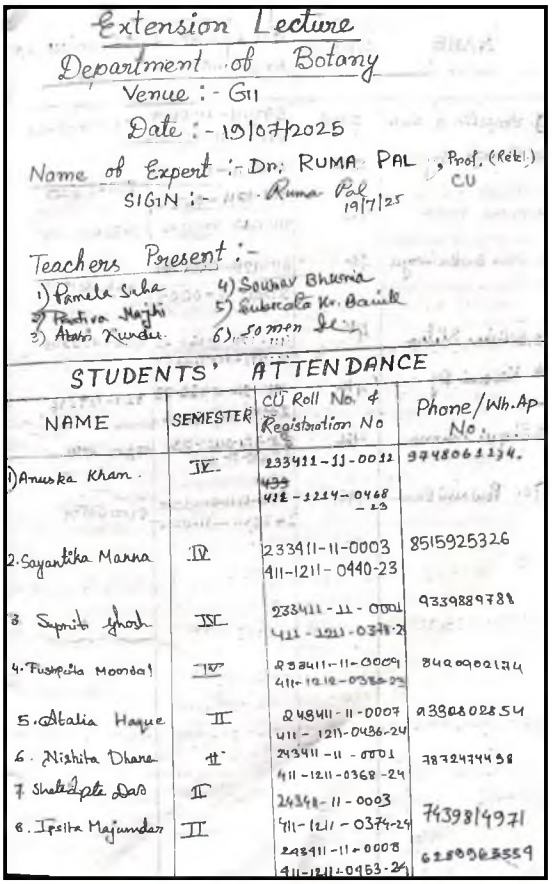
Thanking you

Ruma Pal 17/7/25

Principal/ Secretary

Principal / Secretary
Bijoy Krishna Girls College

10. **Number of Participants (with proof): 16**

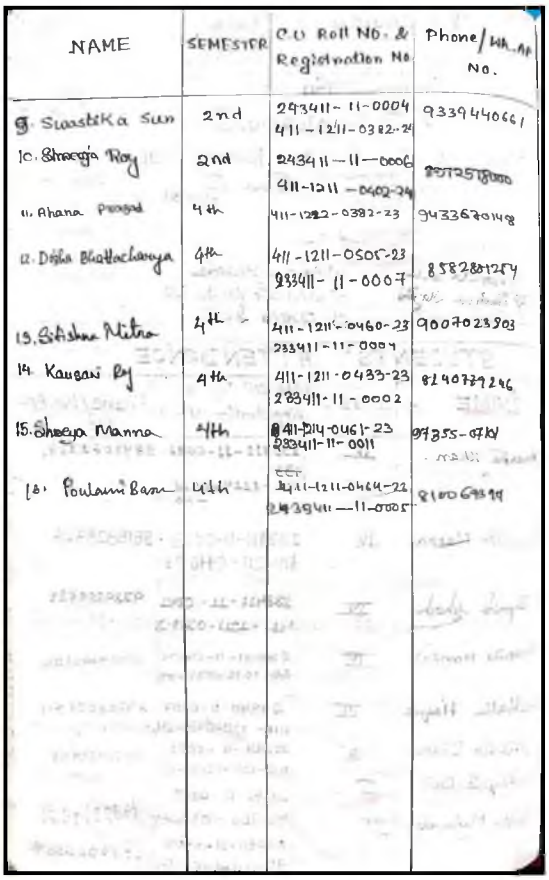


Extension Lecture
Department of Botany
Venue :- G11
Date :- 19/07/2025
Name of Expert :- Dr. RUMA PAL, Prof. (Retd.) CU
SIGN :- Ruma Pal 19/7/25

Teachers Present :-
1) Pamela Saha 4) Sourav Bhunia
2) Prativa Majhi 5) Subrata Kr. Banik
3) Atanu Kundu 6) Soman De

STUDENTS' ATTENDANCE

NAME	SEMESTER	CU Roll No. & Registration No	Phone/Wh.Ap No.
1) Anuska Khan	IV	233411-11-0011 433 412-1214-0468-23	9748061134
2. Sayantika Manna	IV	233411-11-0003 411-1211-0440-23	8515925326
3 Supriti Ghosh	IV	233411-11-0001 411-1211-0378-23	9339889781
4. Pushpita Moondal	IV	233411-11-0009 411-1212-0382-23	8420902124
5. Atalia Haque	II	248411-11-0007 411-1211-0436-24	9382028554
6. Nishita Dhara	II	243411-11-0001 411-1211-0368-24	7872474458
7. Shatadipta Das	II	24348-11-0003 411-1211-0374-24	74398/4971
8. Ipsita Majumdar	II	248411-11-0008 411-1211-0463-24	6280963559



NAME	SEMESTER	CU Roll No. & Registration No.	Phone/Wh.Ap No.
9. Swastika Sur	2nd	243411-11-0004 411-1211-0382-24	9339440661
10. Shreeja Roy	2nd	243411-11-0006 411-1211-0402-24	8017518000
11. Ahana Prasad	4th	411-1212-0382-23	9433670148
12. Disha Bhattacharya	4th	411-1211-0505-23 233411-11-0007	8582801254
13. Sitishna Mitra	4th	411-1211-0460-23 233411-11-0004	9007023903
14. Kousani Roy	4th	411-1211-0433-23 233411-11-0002	8240729246
15. Shreya Manna	4th	411-1214-0461-23 233411-11-0011	9735-07KV
16. Poulami Basu	4th	411-1211-0464-22 243941-11-0005	8100698999

List of Participant:

1. Anuska Khan
2. Sayantika Manna
3. Supriti Ghosh
4. Pushpita Mondal
5. Atalia Haque
6. Nishita Dhara
7. Shatadipta Das
8. Ipsita Majumder
9. Swastika Sur
10. Shreeja Roy
11. Ahana Prasad
12. Disha Bhattacharya
13. Sitishna Mitra
14. Kousani Roy
15. Shreya Manna
16. Poulami Basu

11. **Report on the programme:**

IQAC, BKGC and Department of Botany organized a special lecture on “Non Vascular Cryptogams" on 19th July 2025. The resource person for the Workshop was Dr. Ruma Pal, Retired Professor, Department of Botany, University of Calcutta. Our distinguished Principle, Madam Dr. Ruma Bhattacharyya, opened the occasion with an Inaugural and welcome speech. All of the participants found her lecture to be incredibly inspiring and motivating.

A lecture on *Algal Biodiversity* was delivered to provide an overview of the diversity, classification, ecological roles, and applied importance of algae. The lecture aimed to highlight the significance of algae in maintaining ecosystem balance and their growing relevance in scientific research, industry, and environmental sustainability.

The lecture began with a general introduction to algae, describing them as a diverse group of photosynthetic organisms found primarily in aquatic environments, though some species occur in terrestrial habitats. Algae range from unicellular microscopic forms to large multicellular seaweeds (kelps). The speaker explained that algal biodiversity is vast and spans several taxonomic groups based on pigments, cell structure, storage products, and life cycles. The lecture emphasized that algae contribute significantly to global biodiversity and form the foundation of aquatic food webs. A major portion of the lecture focused on the ecological roles of algae. Algae are primary producers, responsible for nearly half of the world’s oxygen production through photosynthesis. They play a crucial role in carbon sequestration and nutrient cycling. The speaker also discussed algal blooms, explaining both their natural occurrence and harmful effects when excessive nutrient pollution leads to eutrophication. The lecture highlighted the economic importance of algae in various sectors. Algae are used as food, fertilizers, and animal feed. Industrial products such as agar, alginates, and carrageenan are extracted from red and brown algae. The potential of algae in biofuel production, pharmaceuticals, cosmetics, and wastewater treatment was also discussed, reflecting their growing importance in biotechnology.

The speaker stressed the need for conserving algal biodiversity due to threats such as climate change, ocean acidification, pollution, and habitat destruction. Algae were presented as potential solutions to global challenges like climate change mitigation, sustainable energy production, and food security. The lecture concluded by encouraging further research and awareness regarding algal diversity and conservation.

The lecture on algal biodiversity was informative and insightful, providing a comprehensive understanding of the diversity, ecological importance, and applied value of algae. It emphasized the critical role algae play in sustaining life on Earth and highlighted the need for their conservation and sustainable utilization. The lecture enhanced awareness of algae as not just simple organisms, but as vital contributors to environmental stability and human welfare.

12. Programme Outcome:

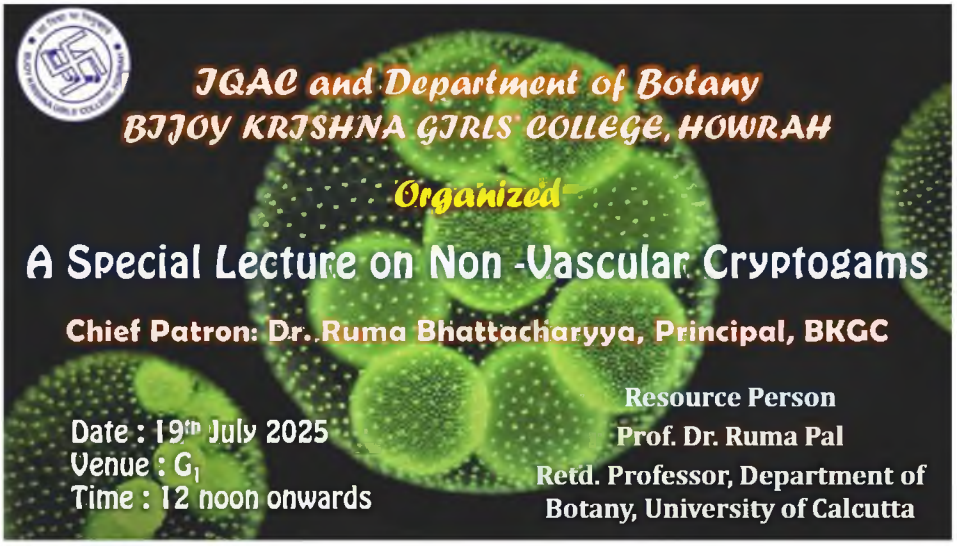
Understand algal diversity and classification, including major groups and their distinguishing characteristics.

Explain the ecological importance of algae, particularly their role in primary productivity, oxygen evolution, and aquatic food webs.

Develop awareness of applied phycology, such as algal cultivation, harvesting techniques, and commercial exploitation.

Analyze current research trends and challenges in algal biotechnology and environmental sustainability.

13. Poster/Brochure/Banner:



14. Sample Certificate:

15. Pictures (Geotagged):