



Tirumala Tirupati Devasthanams

శ్రీ వేంకటేశ్వర కళాశాల

**Sri Venkateswara College**

(University of Delhi)

NAAC Grade A+

**SRI VENKATESWARA COLLEGE  
(UNIVERSITY OF DELHI)**

**FIELD VISIT REPORT**

**NAME OF THE EVENT:** Visit to any tissue culture/biotechnology laboratory: Guru Gobind Singh Indraprastha University (GGSIPU)

DATE	DEPARTMENT	COMMITTEE/SOCIETY	COORDINATORS' NAME
April 8, 2025	Botany	Department of Botany	Dr. Shweta Sharma Dr. Navneet Kumar
TIME	VENUE	NUMBER OF PARTICIPANTS	NATURE: Outdoor/Indoor; online/offline/hybrid
10:00 AM to 3:00 PM	Guru Gobind Singh Indraprastha University (GGSIPU)	39	Outdoor/ offline
FINANCIAL SUPPORT/ASSISTANCE (if any):	No		

**BRIEF INFORMATION ABOUT THE ACTIVITY**

TOPIC/SUBJECT OF THE ACTIVITY	Visit a tissue culture/biotechnology laboratory.
OBJECTIVES	<ol style="list-style-type: none"><li>1. To observe and understand the infrastructure and setup of a tissue culture or biotechnology lab.</li><li>2. To learn about aseptic techniques.</li><li>3. To study different tissue culture techniques (callus induction, somatic embryogenesis, micropropagation)</li><li>4. To understand the applications of biotechnology.</li></ol>

	<p>5. To observe cell culture procedures.</p> <p>6. To learn about molecular biology techniques (PCR, Blotting, DNA extraction, Electrophoresis)</p> <p>7. To interact with PhD students and professors.</p> <p>8. To appreciate the role of biotechnology in research and industry.</p>
<b>METHODOLOGY</b>	An engaging speech/lecture was given by PhD scholars and professors in their field of interest, and we were allowed to see various labs to get the practical knowledge of tissue culture and biotechnology methodologies. We were shown various pieces of equipment that are used for research purposes, and we interacted with a few PhD scholars, and they told us what they are doing in their field and how everything is co-related.
<b>INVITED SPEAKERS WITH AFFILIATION DETAILS</b>  (IF ANY)	NA
<b>OUTCOMES</b>	During the visit, we gained valuable insights into plant tissue culture and various other advanced techniques. It offered us practical exposure to how these procedures are meticulously conducted on a large scale, with careful maintenance of optimal environmental conditions.

**PROOFS & DOCUMENTS ATTACHED (Tick mark the proofs attached):**

1 Notice & Letters  ✓	2 Number of Participants & Name of Participants  ✓	3 Video clip	4 Photos  ✓	5 Feedback Form & analysis
6 News clip with details	7 Sample Copy of the Certificate	8 Posters/ Invites	9 Event report Attested by Event Coordinator & IQAC Coordinator  ✓	10 Any other document
IQAC Document No: SVC/IQAC/BOT/2024-25/April 2025/Offline/ 08		Criterion No: 1 and 2		
Departmental file no: SVC/BOT/2024-25/April 2025/Offline/ 08		IQAC file No: SVC/IQAC/BOT/2024-25/April 2025/Offline/ 08		

NAME OF TEACHERS & SIGNATURE	NAME OF HEAD/ COMMITTEE INCHARGE & SIGNATURE	IQAC COORDINATOR (SEAL & SIGNATURE)
Dr. Shweta Sharma  Dr. Navneet Kumar		

For Reference

Criterion I	Curricular Aspects (planning & Implementation) ✓	Criterion V	Student Support & Progression
Criterion II	Teaching Learning & Evaluation ✓	Criterion VI	Governance
Criterion III	Research, Innovations & Extension	Criterion VII	Institutional Values & Best Practices
Criterion IV	Learning Resources and Infrastructure		

#### **SUMMARY: -**

As part of our academic curriculum in Botany (Economic Botany and biotechnology), we visited **Guru Gobind Singh Indraprastha University (GGSIPU)** on **April 8, 2025**. The visit aimed to provide hands-on exposure to tissue culture techniques, biotechnological applications, and laboratory operations.

#### Observations: -

##### ***1. Laboratory Infrastructure and Equipment***

The lab was well-equipped with essential instruments such as:

- **Laminar Air Flow Hood** (for maintaining aseptic conditions)
- **Autoclave** (for sterilizing media and glassware)
- **Incubators & Growth Chambers** (for maintaining optimal temperature and light conditions)
- **Centrifuge, PCR Machine, Gel Electrophoresis Unit** (for molecular biology work)
- **Microscopes** (for observing cell cultures)
- **Bioreactors** (for large-scale cell culture)

##### ***2. Aseptic Techniques and Sterilization Procedures***

- The lab followed strict **sterilization protocols** to prevent contamination.

- We observed the use of **70% ethanol, UV sterilization of workbenches, and flame sterilization** of instruments.
- **Media preparation** involved autoclaving and adding growth regulators like auxins and cytokinin (for plant tissue culture).

### *3. Tissue Culture Techniques Demonstrated*

- **Explant Preparation:** Selection and surface sterilization of plant/animal tissues.
- **Callus Induction:** Use of growth hormones to induce undifferentiated cell mass.
- **Subculturing:** Transfer of cultures to fresh media to avoid nutrient depletion.
- **Rooting & Acclimatization** (for plant tissue culture) before transferring to soil.

### *4. Molecular Biology Techniques*

- **DNA/RNA extraction** from samples.
- **PCR (polymerase chain reaction)** for gene amplification.
- **Gel electrophoresis** to analyze DNA fragments.

### *5. Applications Discussed*

- **Micropropagation** of elite plant varieties.
- **Genetic engineering** for disease-resistant crops.
- **Production of secondary metabolites** (e.g., vaccines, antibiotics).
- **Stem cell research & regenerative medicine.**

### *6. Challenges & Solutions*

- **Contamination control** (bacterial/fungal) was a major concern, managed by strict hygiene.
- **Variability in culture response** due to explant source and media composition.

#### Conclusion:

The visit provided **practical insights** into tissue culture and biotechnological research. We gained an understanding of **aseptic techniques, culture maintenance, and industrial applications**. The experience highlighted the importance of precision in biotech experiments and the potential of tissue culture in agriculture, medicine, and industry.

Overall, it was an **enriching and informative** exposure that bridged theoretical knowledge with real-world laboratory practices.



Tirumala Tirupati Devasthanams  
శ్రీ వేంకటేశ్వర కళ్యాణం  
Sri Venkateswara College  
(University of Delhi)  
NAAC Grade A+

### PERMISSION FOR ORGANIZATION OF EVENTS

- NOTE: 1. Please ensure a pre booking of the venue before getting the permission letter signed.  
2. A copy of this duly filled form signed by the TIC/ Convener, IQAC Coordinator and Principal shall be submitted to ICT and/or Caretaker for necessary action.  
3. Please ensure that the completion certificate of the event is physically signed by the Convener of the event, IQAC Coordinator and Principal after the event report is made.

### EVENT DETAILS

1. Name of the Department/Society/Association: Botany
2. Name of the TIC and/or Convener: Prof./Dr./Mr./Ms. Dr. Shweta Sharma  
Dr. Navneet Kumar
3. Proposed Title of the Event: Visit to any tissue Culture / biotechnology laboratory
4. Nature of Event: Seminar/Conference/Symposium/Workshop/FDP/Public or Community outreach/ Skill enhancement/others (Please specify) Visit to a laboratory
5. Participants: Student-centric /Faculty/ Other stakeholders (Please specify) Student-centric
6. Event Type: Field visit Offline/Online/Hybrid; offline Indoor/Outdoor
7. Collaborating Agency /Organization (If any): Prof. Varun Joshi (Dean)
8. Tentative List of Speakers with affiliations: Visit to University School of Environment, Management (USEM), GGSIPU, Dwarka Delhi (Part of Syllabus of Life Science practical Economic botany & biotechnology, Semester III, Batch - III)
9. Date & Time (from - to): 08/04/2025; 09:30 am - 12:00 pm
10. Financial Assistance/ Funding received (if any) (Please specify amount): Not required. Students will directly reach to the venue & will take care of their travel themselves
11. Proposed Budget (please attach details in a separate enclosure): will take care of their travel themselves

- 12. Faculty responsible for Geo Tagged Pictures Dr. Shweta Sharma / Dr. Naynet Kumar
- 13. Faculty responsible for Event Report Dr. Shweta Sharma / Dr. Naynet Kumar
- 14. ICT support required, if any (ICT Lab, Laptop, LCD projector) No.
- 15. Caretaker support required (tables, chairs, public addressing system, sanitation, manpower assistance) NO.
- 16. Venue requirement (Seminar hall/ Ground/others) Virt to Guru Gobind Singh Indraprastha University, Dwarka, Delhi

Pothab  
TIC/Convenor 11/4/25

Date: Shweta 01/04/25 [Signature] 01/04/2025

For official purpose

Comments (If any)

Gateway 1, 2

Vahika/atl

IQAC Coordinator

Date: 2/4/2025

Principal

Date:

\* No. of students in Third year life sciences batch III are 56 per lit & expected to visit.

Is this prescribed by curriculum?  
If so, pls attach a copy of it?

[Signature]  
02/4/25



Tirumala Tirupati Devasthanams  
శ్రీ వేంకటేశ్వర కళాశాల  
Sri Venkateswara College  
(University of Delhi)  
NAAC Grade A+

ATTENDANCE SHEET

B.Sc (Semester VI) Life Sciences

TITLE OF THE EVENT: Economic Botany and Biotechnology  
Lab Visit at

DATE OF THE EVENT: 18 April 2025 IP University  
Dwarka

NAME OF THE DEPARTMENT/ SOCIETY: Botany

NAME OF THE EVENT COORDINATOR: Dr. Shweta Sharma  
Dr. Navneet Kumar

S.NO.	NAME OF THE STUDENT	ROLL NO. OF THE STUDENT	COURSE AND YEAR	SIGNATURE
01	Ananya	1122101		Ananya
02	Sheetal	1122109		Sheetal
03	Aaryan	156		Aaryan
4	Shah	166		Shah
5	Malwika	163		Malwika
6	Kavita	162		Kavita
7	Venkatesh	106		Venkatesh
8	Shambhavi	148		Shambhavi
9	Monika	160		Monika
10	Sameeha	141		Sameeha
11	Jyoti	145		Jyoti
12	Sourya	149		Sourya
13	Anishka	138		Anishka
14	Raj	115		Raj
15	Gowrav	107		Gowrav
16	Gurwinder	118		Gurwinder
17	Priyanshu	130		Priyanshu
18	Anisha	902		Anisha
19	Divya	901		Divya
20	Shubhei	903		Shubhei
21	Subhee	121		Subhee
22	Alisha	114		Alisha
23	Purvi	137		Purvi
24	Riya Pal	135		Riya Pal
25	Prakruti	132		Prakruti
26	Vishesh	151		Vishesh
27	Prarthana	122		Prarthana
28	Mihir	124		Mihir
29	Radhika	161		Radhika
30	Khushi	129		Khushi
31	Abhay	146		Abhay
32	Abhijeet	165		Abhijeet
33	Shreya	155		Shreya
34	Ramkeer	120		Ramkeer
35	Vivek	104		Vivek



# FIELD VISIT PICTURES



Autoclave



Hot Air Oven



PCR machine





Tirumala Tirupati Devasthanams

శ్రీ వేంకటేశ్వర కళాశాల

**Sri Venkateswara College**

(University of Delhi)


NAAC Grade A+

समापन प्रमाण पत्र

**COMPLETION CERTIFICATE**

यह प्रमाणित किया जाता है कि वनस्पति विज्ञान (विभाग/सोसायटी) की डॉ. श्वेता शर्मा और डॉ. नवनीत कुमार द्वारा 8 अप्रैल 2025 को सुबह 10 बजे से अपराह्न 3 बजे तक "प्लांट टिशू कल्चर लैब विजिट" सफलतापूर्वक ऑफलाइन मोड में आयोजित की गई थी और इसकी रिपोर्ट रिकॉर्ड के लिए IQAC को प्रस्तुत की गई है।

This is to certify that the "Plant Tissue Culture Lab visit" was successfully conducted on 8 April 2025 from 10 am to 3pm by **Dr. Shweta Sharma and Dr. Navneet Kumar** of (Department/Society of) Botany in the **Offline** mode and its event report has been submitted to IQAC for records.

Shweta  
  
Dr. Navneet Kumar  
Event-in-Charge

  
IQAC Coordinator  
Coordinator, IQAC  
Sri Venkateswara College  
(University of Delhi)  
Chausi Kuan, New Delhi-110025

  
Principal  
Principal  
श्री वेंकटेश्वर कళाशाला  
Sri Venkateswara College  
(University of Delhi)  
Chausi Kuan, New Delhi-110025