#### **ACTIVITY REPORT 2022-23**

## FACULTY: Science

# **DEPARTMENT:** Botany

NAME OF THE	Outdoor Activity - Educational visit of B.Sc. (Prog.) Life Sciences,
ACTIVITY:	Semester IV Students to 'Sunder Nursery Heritage Park' on 21 <sup>st</sup> April, 2023

DATE	FACULTY	DEPARTMENT/ COMMITTEE	COORDINATORS NAME
21/04/2023	Botany	Department of BOTANY	<b>Teacher-In-Charge</b> Dr. Shukla Saluja <b>Event Coordinators</b> – Dr. Muthabathula Prajna Dr. Madhu Raina
TIME	VENUE	NUMBER OF PARTICIPANTS	NATURE (INDOOR/OUTDOOR)
09:00 AM	Sunder Nursery Heritage Park	22	Outdoor

## **BRIEF INFORMATION ABOUT THE ACTIVITY:**

TOPIC/SUBJECT OF THE ACTIVITY	Field Visit to Sunder Nursery: To learn about the medicinal value of different Medicinal Plants, Nursery and green house technologies.
OBJECTIVES	• Field trips give hands on and experiential learning for the students and enhance their abilities to understand. This also

	<ul> <li>promotes critical thinking skills of the students.</li> <li>The main objective of conducting this Educational Field trip for students is to provide experiential learning for better understanding of importance of medicinal plants related to traditional system of medicine</li> <li>To study and understand the importance of Green houses and Nurseries in medicinal plant cultivation and their role in conservation.</li> <li>To understand the role of Gardens/ Parks in Medicinal Plant conservation.</li> </ul>
METHODOLOGY	<ul> <li>To walk through the Garden to see and experience the plants (how wonderful they look like in real and make us feel) and organization of the garden.</li> <li>Listing of the plant species and their medicinal uses whether trees, Shrubs or Herbs growing and their maintenance in the garden.</li> <li>Photographing the plant species for future reference.</li> <li>Explanation of the importance of plant species, Green House and Nursery by the accompanied teachers Dr. Muthabathula Prajna and Dr. Madhu Raina.</li> </ul>
OUTCOMES	<ul> <li>Educational trips play a vital role in experiential learning.</li> <li>The students get to know the varieties of medicinal plants available in the garden and also the ways in which they are being protected and cultivated.</li> <li>They understand the way a nursery is organized and the different propagation methods that are followed in the nursery including green house.</li> <li>They get to know the importance of medicinal plants in traditional and modern systems of medicine, the recreational values they render to the society and significance of medicinal plants conservation through the gardens/ parks.</li> <li>This kind of visits can make students more respectful and empathetic towards plants as well as their surroundings and get indulged them in conservation practices.</li> </ul>

## PROOFS AND DOCUMENTS ATTACHED:

Notice & Letters	Student List of Participation	Activity Report	Photos
✓	√	✓	✓

NAME OF TEACHER & SIGNATURE	NAME OF HEAD/ COMMITTEE INCHARGE & SIGNATURE
Dr. Muthabathula Prajna	M. Prejna
Dr. Madhu Raina	Dr. Muthabathula Prajna

IQAC Document No.: IQAC/SVC/ 2022-2023/ Botany/Outdoor/ 06	Criterion No: II, III, VII
Department File No.: Botany/2022-2023/ Outdoor Activity/ MP	IQAC File No. SVC/2022-2023

## PERMISSION LETTER FOR ORGANIZING THIS TRIP:

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Tirumala Tirup	ati Devasthanama
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(University of C	
NAAC Grade A*	
PERMISSION FOR ORGAN	NIZATION OF EVENTS
NOTE: 1. Please ensure that the completion cer the Convener of the event, IQAC Coordinator am 2. Please ensure a pre booking of the venue befor 3. A copy of this duly filled form signed by submitted to ICT sysadmin@svc.ac.in, C Coordinator iqac@svc.ac.in, Dr. Arpita Kaul a EOC, Empathise, Placement and Sports events, events, Dr. P. Jayaraj jayaraj@svc.ac.in for sci Dr. Nagendra Kumar Kalaparthi nkalaparthi@sv	d Principal after the event report is made. re getting the permission letter signed. the TIC/ Convener and Principal shall be aretaker sandeepluthra@svc.ac.in, IQAC print@svc.ac.in for commerce, NSS, NCC, Dr. Urmi urmi.b@svc.ac.in for humanities ences events. (Mails mentioned in SOP) and
EVENT DI	
1. Name of the Department/Society /Associ	ATION: BOTANY
<ol> <li>Name of the Department/Society /Association</li> <li>Name of the TIC/Convenor (if any): Pro-</li> </ol>	E/Dr./Mr./Ms. Dy. SHUKLA SALUSA/DY. M. PRASINA
enhancement/others. Out.dosr. activit	y. Field visit to Ender Nursey, Nizhmuddin
4. Participants:	Student-centric /Faculty/Both
5. Event Type:	Offline/Online/Hybrid; Indoor/Outdoor
<ol><li>Collaborating Agency /Organization:</li></ol>	Field Vist
<ol><li>Proposed Title of the Event:</li></ol>	
8. Tentative List of Speakers with affiliation	
	21.04.2023 9AM to 1:00PM
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10. Financial Assistance/ Funding received (	
11. Proposed Budget (please attach details in	
	D. M. PLATNA
12. Faculty responsible for Geo Tagged Picto	ares DI. DI DRATAIA
13. Faculty responsible for Event Report	Dr. MI-PRESIM
14. ICT support required, if any (ICT Lab, I	aptop, LCD projector) ND
Accompanying Teacher	: DY. MADHU RAINA
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<ol> <li>Caretaker support required (ta manpower assistance)</li> </ol>	bles, chairs, public address	ing system, sanitation,
16. Room requirement (Seminar/	any other) NO .	
M. PLETA M. PLETA Name & Signature of TIC/Conve	hor Sotraly Dept.	C Stuite Curry Signature of Principal
Date: 19 .04.2023		Date: 20/4/202
Date: 19 .04.2023		Date: 20/4/202

## **STUDENTS LIST:**

SNo	Roll Number	Name of the student	
5.140.	1121100	Pooja	
2	1121115	Nimmi	
3	1121026	Jeeya Maddhesia	
4	1121043	Kashish Dogra	
5	1121029	Rashi Dudeja	
6 7	1121025 1121013	Muskan Garg Khushboo	
8	1121013	Himani	
9	1121023	Pushkar	
10	1121156	Manju	
11 12	112143 1121176	Rajni Radhika	
12	1121170	Rashmi	
14	1121125	Punita	
15	1121158	Priyanka Neha	
16 17	1121123 1121171	Mansi Yadav	
18	1121165	Ritika	
19		Itika Kashish grover	
20 21		Lalit Kumar	
22		Meghn Makelh	
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## CERTIFICATE

This is to certify that the Field visit to Sunder Nursery, Nizamuddin, New Delhi was successfully conducted on 21/04/2023 from 09:00am to 01:00pm by Botany Department in the Offline mode and its event report has been submitted to IQAC for records.

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MPrep

Event In-Charge

**IQAC** Coordinator

Coordinator, IQAC Sri Venkateswara College (University of Delhi) Dhaula Kuan, New Delhi-110021

C. Sanca Ray

PRINCIPAL Sri Venkateswara College (University of Delhi) Dhaula Kuan, New Delhi-110021

#### **ACTIVITY REPORT**

Sunder Nursery is a large garden located in the heart of Delhi, and is a home to a diverse array of flora and fauna. The park is spread over 90 acres and is known for its rich biodiversity that includes more than 300 plants of tree species, shrubs and plants; 80 species of birds and wide variety of butterflies, insects and small animals. The park is home for several endangered species including Indian flapshell turtle and the painted stork. In addition to its natural beauty, Sunder Nursery is also known for its historic significance, as it houses several ancient monuments, tombs and maintained gardens of Mughal era. Sunder Nursery is hosting different plant varieties and there are certain plants unique to this Garden and are being grown from several years with utmost care and concern. Overall, Sunder Nursey is a prime example of how a park can serve as a sanctuary for flora and fauna; it also provides recreational and educational opportunities for visitors.

There were many different species of plants at the Sunder nursery. We started our journey with visit to Herbal garden first, which is with a variety of medicinal plants such as *Mentha arvensis*, *Trachyspermum ammi*, *Bacopa*, *Origano*, *Madhuca indica*, *Ocimum sanctum*, *Catharanthus roseus* and many other plants. There was an exclusive block for varieties of Roses, which was a scenic beauty. Other than these, there were many oranamental plants including *Balsam*, *Coreopsis*, *Cosmos*, *Gaillardia*, *Portulaca*, *Saliva*, *Zinnia* etc. We observed a wide variety of flowering plant blocks such as garden with different varieties, marigold, dahlia, *Canna* and bougainvillea, which added a splash of colours to the garden. Strolling through the astonishing heritage sites and water bodies the students refreshed and enjoyed the environment.

There are native plants like shisha, guava and chalta, a few of the exotic species set up in the nursery are badminton ball tree, tun, Brazilian ironwood, whistling pines, and colville's glory. While 20 acres of the garden are utilized for cultivating nursery beds which are well maintained, another 30 have been devoted to establishing a biological diversity zone, bee conservation zone, micro habitat zones with wilderness for the visitors to walk through into the nature. The students got a chance to study about created wetland inside the heritage site and fountain as well. At the end it was refreshing away from regular activities and a great learning experience to everyone.

Below are some Medicinal Plants observed in the field with their medicinal values and active constituents are as follows:

**1. Coreopsis** Botanical name –*Coreopsis grandiflora*  Family –Asteraceae Common Name - tickseed

#### Medicinal uses

1. Amerindians used root tea for diarrhea and as an emetic.

2. Dried tops in a tea used to strengthen the blood.

3. Boiled plants to make a drink for internal pains and bleeding.

#### Use a food

1. Flower boiled in water makes a red liquid used as a beverages.

#### Uses as ornamental

1. Widely cultivated as an ornamentals in common nurseries and herbal gardens.

2. It's used to decorate he fences of the garden and acts as an attractant for the nectar by bees, butterflies, insects and birds.

### 2. Sweet Alyssum

Botanical name - *Lobularia maritima* Family – Brassicaceae

#### Medicinal uses

- 1. The plant is commonly used in Spain as an antiscorbutic and diuretic.
- 2. It is also highly esteemed there as an astringent in the treatment of gonorrhoea

### 2. Cosmos

Botanical name -Cosmos bipinnatus

Family -Asteraceae

### Medicinal uses

1. It's exhibits highest anti-oxidant activity.

2. It'shas anti -diabetic properties because it's help in reduction of lipid and plasma glucose.

3.Anti-hypertensive, stroke volume amplitude induced by adrenaline.

4. Anti-inflammatory, induced by carrageenam.

5.Exhibit Anti-microbial and anti-fungal properties, significantly inhibits the growth of microbial strains.

### 3. Gaillardia

Botanical name- *Gaillardia grandiflora*. Family-Asteraceae

Common name-Blanket flower

### Medicinal uses

1.Tea of root for gastroenteritis.

2. Chewed powder root applied to skin disorders.

3.Sore nipples of nursing mothers bathed in tea made from plants.

4. It's also used for sore eyes.

#### 4. Sadabahar

Botanical name -*Catharanthus roseus* Family-Apocynaceae Common name - sadabahar, Periwinkle

### Medicinal Uses

1. Sadabahar flowers are rich in flavonoids, alkaloids, carbohydrates & phytochemicals like vinblastine & vincristine, vincardine that are useful in conditions such as cancer, diabetes, high blood pressure & stroke. Because of active constituents the plants is also called as anti-cancerous plant.

2. Sadabahar plants also having antimicrobial, healing properties. Sadabahar actively heals wounds and prevents skin infections.

3. Sadabahar leaves and flower also using for making facial mask. Sadabahar leaves are used to make juice and consumed.

#### 5. Portulaca

Botanical name – *Portulaca grandiflora* Family-Portulacaceae

Common Name - Twleve o'clock plant

#### **Medicinal Uses**

1. The entire plant is depurative.

2. It is used in the treatment of hepatitis, cirrhosis of the liver with ascites, swelling and pain in the pharynx.

3. The fresh juice of the leaves and stems is applied externally as a lotion to snake and insect bites, burns, scalds and eczema.

### 6. Zinnia

Botanical name - *Zinnia elegans* Family - Asteraceae Common name- Youth and age, elegant zinnia

### **Medicinal Uses**

1. Zinnia species are used in folk medicine for the treatment of Malaria and stomach pain.

2. It is also used as hepeto-protective, antiparasitic, antifungal & antibacterial agents.

3. Zinnia is suitable for oily skin, as it helps to contract and open up the skin pores.

4. In victorian culture, gifting someone with zinnia means that you consider the person your close friend.

### 6. Sunflower

Botanical name -Helianthus annuus

Family – Asteraceae Common name – Surajmukhi

#### **Ornamental uses**

1. It is used as ornamental due to beautiful flower that such a beautiful sight to behold either growing in the yard or as cut flowers in a vase.

2. It is used to make jewellery and vase and sometimes as in gifts also.

### **Edible Properties**

1. To make vegetable oil, considered to be healthier due to low in saturated fat. Thus, the oil is largely used for cooking and baking.

- 2. The tender leaf petioles, seed and flowers are edible.
- 3. The seeds are used to extract edible oil, which is rich in vitamin E.

## **Medicinal Uses**

- 1. The sunflower utilized by the Europeans as a remedy for pulmonary affections.
- 2. A preparation of the seeds has been widely used for cough and cold.
- 3. In the Caucasus the seeds have served as a substitute for quinine in the malaria.
- 4. The paste of sunflower seeds used for the treatment of skin disorder.
- 5. Leaves are expectorant, diuretic and astringent.
- 6. The intake of sunflower leaf tea helps to reduce fever.
- 7. The poultice of leaves is applied on sores, spider-snake bites and the swelling.

## 7. Jangli Badam

Botanical Name: Sterculia foetida

Family: Sterculiaceae

## **Medicinal Uses**

1. Used as stamina booster, cure diarrhea, treat hepatitis, relieve infections and anti-cancer.

## Geo-tagged Pictures clicked during the visit:







Medicinal Plant species, propagation through grafting, green house and Bonsai garden found at the Sunder Garden



Sunder Nursery: water bodies, tombs to make it more recreational and housing a number of fauna



Group of students with teachers in the Sunder Nursery