

**Department of Environmental Science**

**Criteria No: 3.5.1**

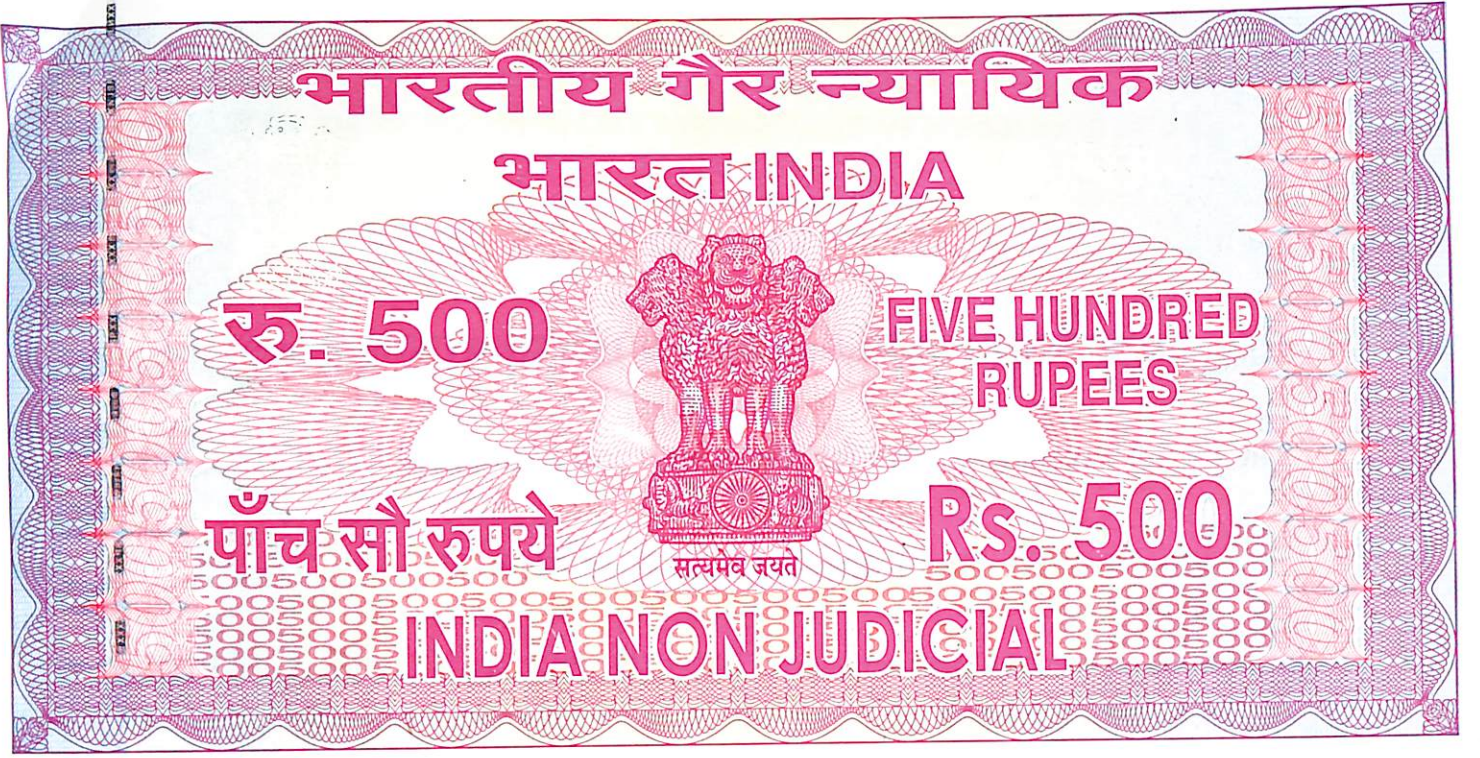
**Activity Name**

**MoU between**

**Department of Environmental Science, Haribhai V. Desai college**

**And**

**Pune Knowledge Cluster Foundation (PKCF)**



महाराष्ट्र MAHARASHTRA

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अनु.क्र. 17657/ दि. 27 MAR 2023 मु.सु.रकम रु. 500

दस्तावा प्रकार:- MOV

दस्त नोंदणी करणार आहेत का ? होय/नाही.

बिळकतीचे बर्णन Haribhai V. Desai College

मुद्रांक विकत घेणाऱ्याचे नांव Budehad Peshkar


पत्ता PK Shreyas Subhash Telshale

दुसऱ्या पक्षकाराचे नांव Teja Keshav बत्ती- 97 Keshavnagar

हस्ते व्यक्तीचे नांव- Teja Keshav

  
मुद्रांक विकत घेणाऱ्याची सही

जब कारणसाठी ज्यांनी मुद्रांक खरेदी केला त्यांनी त्याच कारणसाठी मुद्रांक खरेदी केल्यापासून 6 महिन्यात वापरणे बंधनकारक आहे.

  
संजय रघुनाथ चौधरी  
बरगाना क्र. 2209994  
964, कसबा पेठ, पुणे-99.

21 MAR 2023

प्रथम मुद्रांक विकत घेणाऱ्याची सही  
कोषकाराचे मुद्रांक



MEMORANDUM OF UNDERSTANDING





**PUNE KNOWLEDGE CLUSTER FOUNDATION (PKCF)**

The Inter-University Centre for Astronomy and Astrophysics (IUCAA), Post

Bag 4, Ganeshkhind, Pune - 411007

**AND**

**HARIBHAI V. DESAI COLLEGE, PUNE**

596, Behind Shaniwar Wada, Budhwar Peth,

Pune - 411 002, Maharashtra, India

**THIS MEMORANDUM OF UNDERSTANDING** is made on 27/03/2023

**Between**

**PUNE KNOWLEDGE CLUSTER FOUNDATION (PKCF)** (IUCAA), Ganeshkhind,  
Pune 411007

**And**

**Haribhai V. Desai College, Pune** the First Party represented herein by its Principal Dr. Rajendra Gurao (hereinafter referred to as 'First Party' the institution which expression, unless excluded by or repugnant to subject or context shall include its successors — in-office, administrators and assigns).

**WHEREAS**

This Principal MoU has been signed between Haribhai V. Desai College and Pune Knowledge Cluster Foundation (**PKCF**). PKCF and HVD are collaborating for establishing Academic links, and wish to strengthen the ties between their respective institutions by entering into this Memorandum of Understanding ("MoU").

## NOW IT IS HEREBY AGREED:

### PURPOSE

1. PKCF is a not-for-profit company registered under section 8 of the Companies Act, 2013 and is promoted by The Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune.
2. The Office of the Principal Scientific Adviser (PSA) has also recognized PKCF as a bonafide legal entity of the Pune Science and Technology Cluster.
3. The purpose of this MoU is to develop cooperation and collaboration between HVD and PKCF in undertaking various programmes and projects to further the aims of the Parties **"PURPOSE"**

### OBJECTIVES

In furtherance of this purpose, the Parties agree to develop the following activities in collaboration in areas of mutual interest:

- 1.1 Involvement of the faculty, staff and students of HVD in the programmes and projects of PKCF
- 1.2 Identifying and preparing new projects of mutual interest to the Parties in the verticals of the PKCF
- 1.3 Identifying opportunities for conducting lectures, lecture courses and seminars and organizing symposia and conferences
- 1.4 Participation of the students of HVD in the internship programme of PKCF
- 1.5 Identifying opportunities for conducting collaborative research and development with organisations associated with the PKCF
- 1.6 Exchanges of academic information and materials
- 1.7 Promoting collaboration in fields of mutual interest
- 1.8 Promoting other academic and R&D co-operation and collaboration as mutually agreed

## **APPROVALS**

The development and implementation of specific activities developed under this MoU will be the subject of formal written agreements negotiated and entered into separately, which will deal with the financial arrangements, confidentiality, ownership and use of intellectual property, publication of articles or other work and other relevant matters.

## **INTELLECTUAL PROPERTY RIGHTS (IPR)**

1. Information on research results and scientific materials (reports, articles, books) will be exchanged freely keeping in mind the mutually agreed provision of Intellectual Property Rights. All intellectual property solely conceived and/or developed by HVD during this Agreement shall be owned by HVD. All intellectual property solely conceived and or developed by PKCF during this agreement shall be owned by PKCF. Intellectual property jointly conceived and or developed by PKCF and HVD will be jointly owned by PKCF and HVD. Research articles can be published with intimation to both parties. Each party may use such property only for research and scholarly purposes. PKCF and HVD will be committed to the protection, if appropriate, and application of such intellectual property for commercial or other purposes on mutually acceptable terms to be negotiated in good faith between PKCF and HVD.

2. PKCF and HVD shall acknowledge one another in any form of writing, publication or presentation based on research derived from the cooperative efforts of both parties under this MoU unless otherwise mutually agreed upon in writing by the parties.

3. Before the exchange of confidential Information under this MoU, both parties shall execute a separate Non-Disclosure Agreement (NDA).

## **VARIATION**

This MoU may only be amended by a written agreement signed by a duly authorized representative of each Party.

## **DURATION**

This MoU shall commence on the date of its execution by the last Party to sign and shall remain in force for a period of three years. Each Party shall review the status of the MoU at least six months before the end of the three years to determine whether it wishes the MoU to continue and, if so, whether any modifications are required. The period of validity of this MoU may only be extended by the mutual written consent of both Parties.

## **TERMINATION**

Either Party may terminate this MoU by giving three months' notice in writing to the other. The termination of this MoU shall not affect the implementation of any specific activities established under it prior to such termination.

## **CHARGES AND LIABILITIES**

1. It is understood that the implementation of any of the types of cooperation stated in Clause 3 shall depend upon the availability of resources and financial support of the Parties concerned.
2. Except as otherwise provided or agreed, the parties shall each bear their own costs and expenses incurred in complying with their obligations under this MoU.
3. Both parties shall remain liable for any losses or liabilities incurred due to their own or their employee's actions and neither party intends that the other party shall be liable for any loss it suffers as a result of this MoU.

## **STATUS**


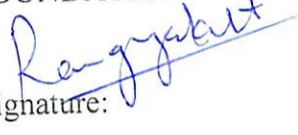
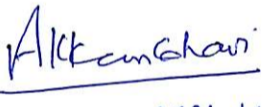
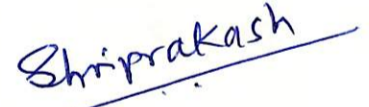

1. This MoU is not intended to be legally binding, and no legal obligations or legal rights shall arise between the parties from this MoU. The parties enter into the MoU intending to honour all their obligations.
2. Nothing in this MoU is intended to or shall be deemed to, establish any partnership or joint venture between the parties, constitute either party as the agent of the other party,

authorize either of the parties to make or enter into any commitments for or on behalf of the other party.

### GOVERNING LAW AND JURISDICTION

1. Both Parties agree that staff and students of either institution engaged in activities under this MoU shall carry out these activities in accordance with all applicable laws and regulations of their respective countries after full consultation and approval.
2. This MoU shall be governed by and construed in accordance with Indian law and each party agrees to submit to the exclusive jurisdiction of the courts of India.

Each Party hereby confirms its agreement to the terms of this Memorandum of Understanding:

<p>HARIBHAI V. DESAI COLLEGE</p> <p>Signature: </p> <p><b>Dr. Rajendra Gurao</b> Principal, HVD</p>	<p>PUNE KNOWLEDGE CLUSTER FOUNDATION</p> <p>Signature: </p> <p><b>Dr. Ranganayaki Nagaraj</b> CEO, PKCF</p>
	<p></p> <p>Director <b>Prof. Ajit Kumbhavi</b> PKCF</p>
<p>Witness:</p> <p></p> <p>Signature: <u>Dr. S. G. Sani</u></p> <p>XXXXXXXX</p>	<p>Witness: <b>Shreyas Dilip Khade</b></p> <p>Signature: </p> <p>XXXXXXXX</p>



**Department of Environmental Science**

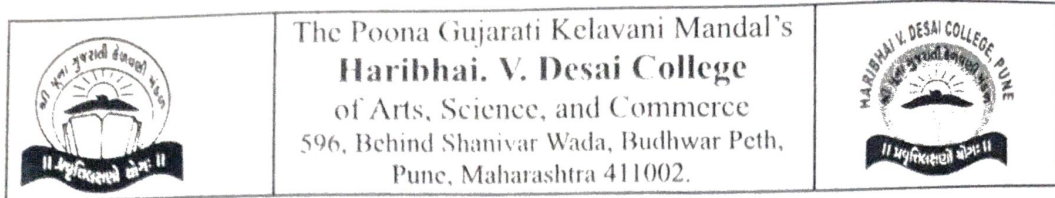
**Criteria No: 3.5.1**

**Activity Name**

**Lecture on Connect Tree**

**By**

**Pune Knowledge Cluster Foundation (PKCF)**



**Activity Report**  
**Topic: Lecture on Connect Tree**  
**Date: 7<sup>th</sup> October 2022**

The Department of Environmental Science had organized a Lecture on Connect Tree in association with Pune Knowledge Cluster (PKC) on 7th October 2022. Various Department students actively participated in this activity.

Following are the details of the Bird Watching activity:

**Event Name:** Lecture on Connect tree

**Date:** 7th October 2022

**Time:** 10 am- 12 pm

**Activity Co-ordinator:** Mrs. Amruta Chavan

**For Whom:** Students of all the department

**Platform:** College level

**Number of attendees:** 78


**Brief Report:**

A lecture on connect tree was organized in association with Pune Knowledge Cluster (PKC). Mr. Shreyas Khade, member of PKC conducted the lecture to impart knowledge about the techniques for plantation. He also explained about the app "**Connect Tree**" where all the trees planted by the students are mentioned with all the details of the plants. This app is developed by PKC. The app consists of the information about the location of the plants, date and time on which it was planted, name of the plant, name of the person who planted the trees. The students can update the information about the plant they have planted on the app when the tree is in the growing phase and add information about the growth of the plant. He also gave information about various types of plants and how to take care of them. Students of all the departments participated in the lecture.

**Outcome:** The students participated enthusiastically in the lecture. Students asked questions with curiosity and learned techniques of plantation.

**Conclusion:** The purpose of conducting the lecture was fulfilled. The students gained knowledge about the plants and about the app.

  
Mrs. Amruta Chavan  
Co-ordinator, M. Sc. Env. Sci.

  
Dr. Rajashree Patwardhan  
Vice- Principal (Science)

  
Dr. Ganesh D. Raut  
Principal



The Poona Gujarati Kelavani Mandal's  
**Haribhai. V. Desai College**  
of Arts, Science, and Commerce  
596, Behind Shanivar Wada, Budhwar Peth,  
Pune, Maharashtra 411002.



### Photos of Lecture on Connect Tree



### Lectures by Mr. Shreyas Khade (Member, PKC)



### Photos of participated students in the Lecture



The Poona Gujarati Kelavani Mandal's

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(Arts, Science, and Commerce)

596, Behind Shanivar Wada, Budhwar Peth, Pune, Maharashtra 411002.



Department of Environment Science

Academic Year 2022-23

"Pune Knowledge Cluster Outreach Program"

SR. NO	NAME	CLASS	SIGN
1	EKNATH DANDADRE	MSc-II (Micro)	Eknath
2	Sayali Dhavale	MSc-II (Micro)	Sayali
3	Hemakshi Sapta	MSc-II (Micro)	Hemakshi
4	Anjali Dumada	MSc-II (Micro)	Adumada
5	Gunjan Chaurasiya	MSc-II (Micro)	Gchaurasiya
6	Yogita Raskar	MSc-II (Micro)	Yogita
7	Dhamale Ashwini	MSc-II Micro	Ashwini
8	Rutuja Thorat	BBA SY	Rutuja
9	Preerna Shedage	SY BBA	Preerna
10	Sayali Manjare	SY BBA	Sayali
11	Nidul Sawant	SY. BBA	Nidul
12	Sushma Tadke	S.Y. BBA	Sushma
13	Megha Kambar	S.Y. BBA	Megha
14	Payal U. Jare	MSc Micro II	Payal
15	Gaurav Shinde	MSc Micro II	Gaurav
16	Patil Shrikrishna	MSc Micro II	Patil
17	Shubham Jadhav	MSc Micro - II	SDJ
18	Shubham Patel	MSc Micro - II	Shubham
19	Mithil Bhojgire	MSc Micro - II	MB
20	Mayuri Pawar	MSc Micro II	MP
21	Radhika Potdar	MSc Micro - II	Radhika
22	Jagtap Kirti	MSc Micro II	Jagtap
23	Gargi Gujjuware	MSc Micro II	Gargi
24	Srushti Tathwadkar	MSc Micro II	Srushti
25	Aarti Pawar	MSc Micro II	AP
26	Vaishnavi Shitole	MSc Micro II	Vaishnavi
27	Revati Salunke	MSc Micro II	Revati
28	Vishwaja Dhengale	MSc Micro II	Vishwaja
29	Manasi Sathe	MSc Micro II	Manasi
30	Priyal Gokhad	MSc Micro II	Priyal
31	Sayali Nagtilak	MSc Micro II	Sayali
32	Nandini Kumbhe	MSc Micro II	Nandini



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Department of Environment Science

Academic Year 2022-23

"Pune Knowledge Cluster Outreach Program"

SR. NO	NAME	CLASS	SIGN
33)	Akhayra Gosavi	Msc - Micro II	Akhayra
34)	Kalyan Shilar	Msc - Micro II	<del>Kalyan</del>
35)	Sakshi Pilani	Msc - Micro II	<del>Sakshi</del>
36)	Aditi Gurnal	Msc - Micro II	Aditi
37)	Atul Path	Msc - Micro II	Atul Path
38)	omkar Tibe	S.Y.B.B.A	omkar
39)	shubham H. Patkar	S.Y.B.B.A	Shubham
40)	Shreyash D. Narawade	SYBBA	Shrey
41)	OMKAR D. KADAM	S.Y.B.B.A	OK
42)	Chetan Lohar	S.Y.B.B.A	Chetan L.
43)	Sahil Navale	S.Y.B.B.A	SANVAL
44)	Ghanshyam Mishra	S.Y.B.B.A	Ghanshyam
45)	Meet Oswal	S.Y.B.B.A	MSOswal
46)	Ezaz Shaikh	S.Y.B.B.A	Ezaz
47)	Draashti Shah	S.Y.B.B.A	Draashti
48)	Urvi Oswal	S.Y.B.B.A	Urvi
49)	Aditya Sattre	S.Y.B.B.A	Aditya
50)	pranav bhise	S.Y.B.B.A	P.B.
51)	Meet Poreksh	SYBBA	Meet
52)	Om Shelke	S.Y.B.B.A	Shelke
53)	Abhishek B. Suryvamski	S.Y.B.B.A	Abhishek
54)	Dhruv Doshi	S.Y.B.B.A	Dhruv
55)	Anushka A. Bhandare	S.Y.B.B.A	Anushka
56)	Siddhant S. Almene	SYBBA	Siddhant
57)	Archana R. Khatpude	S.Y.B.B.A	Archana
58)	Paumima Nalawade	S.Y.B.B.A	Paumima
59)	Samrudhji Patil	SYBBA	SPatil
60)	sanskriti R. Kadam	SYBBA	Sanskriti
61)	Itisha G. shitole	S.Y.B.B.A	Itisha
62)	kalyani V. Gaikwad	Msc EVS II	Kalyani
63)	Shubhangi Vaidya	Msc II EVS	Shubhangi
64)	Neha D. Bahadur	Msc II EVS	Neha
65)	Naina Ukey	Msc II EVS	Naina



**Department of Environmental Science**

**Criteria No: 3.5.1**

**Activity Name**

**Geotagging of Plants at Parvati Hills**

**Under MoU Signed with**

**Pune Knowledge Cluster Foundation (PKCF)**



The Poona Gujarati Kelavani Mandal's  
**Haribhai. V. Desai College**  
(Arts, Science, and Commerce)  
596, Behind Shanivar Wada, Budhwar Peth, Pune, Maharashtra 411002.



**Department of Environmental Science**  
**Academic Year 2022-23**

### NOTICE


**Date: 11/04/23**


All the students are hereby informed that the Department of Environmental Science is organising a visit to Parvati Hills for the purpose of Geotagging of plants on Tuesday, 18<sup>th</sup> April, 2023. The students will be guided by the experts of Pune Knowledge Cluster Foundation (PKCF). ConnecTree program of PKCF is a participatory program helping students to develop a strong bond with green cover around them and it will have opportunity to record survival and phenological observations of saplings. With this activity we can improve survival rate of sampling plantation initiative. All the students of M.Sc. Environmental Science and second year students of B.Sc., are instructed to participate in the event. All the students should submit the required NOC before 15<sup>th</sup> April, 2023.


Venue: Parvati Hills  
Date: 18<sup>th</sup> April, 2023  
Time: 8 am to 10 am

#### **Instruction:**

- Students must reach the venue sharp by 7:45 am.
- All must carry caps and water bottles.
- Students must have internet access in mobile for geotagging.

For   
**Mrs. Amruta Chavan**  
Coordinator  
M.Sc. Env. Sci.

  
**Dr. Rajashree Patwardhan**  
Vice- Principal  
Science faculty

  
**Dr. Rajendra Gurao**  
Principal  
H. V. Desai College





The Poona Gujarati Kelavani Mandal's  
**Haribhai. V. Desai College**  
of Arts, Science, and Commerce  
596, Behind Shanivar Wada, Budhwar Peth, Pune,  
Maharashtra 411002.



### Activity Report

**Activity Topic: Geo-Tagging of plants at Parvati Hills**

**Date: 18<sup>th</sup> April, 2023**

The Department of Environmental Science had conducted "Geo-Tagging of plants" at Parvati hills with involvement of M.Sc. (Environmental Science) and S.Y. BSc (UG) students and faculty members in association with Pune Knowledge Cluster Foundation (PKCF) under Connect Tree Program on 18<sup>th</sup> April, 2023.

#### Following are the details of the Event:

**Event Name:** Geo-Tagging of plants, 2023

**Date:** 18<sup>th</sup> April, 2023

**Time:** 8 am- 10 am

**Venue:** Parvati Hills, Pune

**Activity Coordinator:** Ms. Sayali Dhole

**Department Name:** Department of Environmental Science

**For Whom:** M.Sc Environmental Science and S.Y.BSc Students of Haribhai V.Desai College ,Pune

**Platform:** College Level

**Number of attendees: Total students-34**

**Faculty members-05**

#### Brief Report:

On the day of the activity, all the M.Sc. and S.Y. BSc students along with faculty members reached Parvati hills at 8 am. The event was started with brief introduction about geo-tagging by Mr. Shreyas khade, member of Pune Knowledge Cluster Foundation (PKCF),SPPU, Pune. He guided us all with operating of Connect Tree website, step by step with detail information. He further instructed about the entering/filling of data which included (Species Local Name, Botanical Name, Sapling Name, Plantation Date, Height (ft),Description about plant , Exact coordinates and photo of particular saplings) on Connect Tree website.

All the students were divided into two groups along with faculty members. Students were guided with the plant's identification with their local and scientific name by Mr. Bagdhane sir, (HOD Botany) and Mrs. Revati Madam, member of Pune Knowledge Cluster Foundation (PKCF), SPPU, Pune. Both the group of students geotagged the planted saplings within the premises of Parvati hills. Our students nearly geotagged 100 saplings.

The activity was further continued with watering of plants by students and photo session of all attendees, along with faculty members of Environmental Science, HOD Botany, Dr.Rajashree Patwardhan, Vice principal, science faculty of H.V.Desai College, Pune and members of Pune Knowledge Cluster Foundation(PKCF),SPPU, Pune. The activity was concluded with provision of refreshments and with very wonderful and informative interaction of students with all faculty members.



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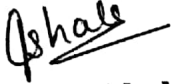


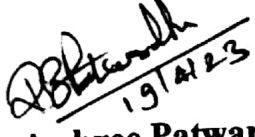
### List of Geotagged Plants:


Species Local Name	Species Botanical Name
Arjun	<i>Terminalia arjuna</i>
Bakul	<i>Mimusops elengi</i>
Karanja	<i>Millettia pinnata</i>
Pachunda	<i>Capparis divaritica</i>
Kaduneem	<i>Azadirachta indica</i>
Pandhari sawar	<i>Ceiba pentandra</i>
Kanchan	<i>Bauhinia variegata</i>
Tamhan	<i>Lagerstroemia speciosa</i>
Nilmohar	<i>Jacaranda mimosifolia</i>
Banyan	<i>Ficus benghalensis</i>
Peepal	<i>Ficus religiosa</i>

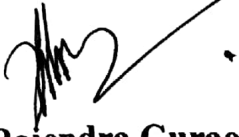
**Outcome:** Students were guided with plant identification with their specific characteristics. Students understood the importance of plants geo-tagging and how they can keep track of the health, age and condition of plants. They understood the necessity of their participation in planting and conserving our biodiversity.

**Conclusion:** The activity was successfully conducted with students enthusiastic participation and their willingness to attend more such environmental activities was seen.

  
Ms. Sayali Dhole  
Event coordinator

  
Dr. Rajashree Patwardhan  
Vice principal (Science)

  
Mrs. Amruta Chavan  
Coordinator, M.Sc.Envi.Sei

  
Dr. Rajendra Gurao  
Principal



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### Photos of Plant Geo-Tagging Activity:



Students while geotagging of saplings



Students during watering of plants



Group photo of students with Respected Vice principal, Dr. Rajashree Patwardhan, H. V.Desai college, Pune, members of PKCF (Pune Knowledge Cluster Foundation ,SPPU, Pune ,Respected Mr. Bagdhane sir, HOD of Botany and faculty members of Environmental Science Department.

PGK Mandal's  
Haribhai V. Desai College of Arts, Science and Commerce  
Department of Environmental Science  
Attendance Sheet of Geo-Tagging Activity

Date: 18/04/23

Time: 8 am to 10 am

Sr. No.	Name	Department	Sign
1	Rutuja Salunke	micro, zoo	
2	Shikshmbhaji Ghone	Botany	S.S. Ghone
3	Aaritya Alekar	Botany	
4	Sneha Jadhav	Botany	
5	Aukita More	microbiology	
6	Siddhi Waghmode	microbiology	
7	Sanjana Jadhav	microbiology	
8	Shrushti Sajjan	Botany	
9	Revati Bhagade	Botany	
10	Snehal Vasanekar	Botany	
11	Neha Dahanonde	Env. Science	
12	Nayana Uikay	Env. Science	
13	Gangadhar Dorkar	EVS	
14	Kaushika Pawar	EVS	
15	Pratiksha Bodhe	Botany	
16	Binu Yadav	Micro-botany	
17	Shweta Palse	Botany	
18	Sakshi More	Botany	
19	Trupti Madane Shendge	Botany	
20	Neha Madane	Botany	
21	Shrushti Sajjan	Botany	
22	Neha Rawal	microbiology	
23	Snehal Simalkar	microbiology	
24	Vasthraj Barbhai	Microbiology	
25	Shambhavi Patil	Microbiology	
26	Bhargavi Nimhan	" "	
27	Shreyash Daul	" "	
28	Shravani Goske	Microbiology	
29	Shweta Kumbhar	Botany	
30	Shrushti Yekar	Microbiology	
31	Sushrut Sawarkar	Botany	
32	Pranav Patil	Microbiology	
33	Parth Varde	Botany	
34	Vishwas Kumbhar	Microbiology	
35	Dr. Kalas Bagane	MOD Botany	
36	Dr. Rajashree Patil	Vice-Principle	
37			
38			
39			