

# SHRI SHIVAJI EDUCATION SOCIETY, AMRAVATI'S SHRI SHIVAJI SCIENCE COLLEGE, AMRAVATI



NAAC: A+ Grade (CGPA 3.42), UGC: CPE, NIRF-2022 & 2023: Rank Band 151-200 DBT: STAR College (Strengthening Component),
DST: FIST, ISO: 9001-2015, SGBAU: Lead College, Career Katta: Centre of Excellence



AQAR 2022 -2023

# Criterion-III RESEARCH, INNOVATIONS AND EXTENSION

Metric No: 3.5.2

Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year





Shri Shivaji Education Society, Amravati's

# SHRI SHIVAJI SCIENCE COLLEGE

Shivaji Nagar, Morshi Road, Amravati - 444 603 (M.S.)

NAAC Accredited by Grade "A\*" with CGPA of 3.42 (IV Cycle)
UGC Awarded Status of CPE (II Phase)
Identified by DST, Government of India for FIST, SGBAU-Lead College,
ISO 9001: 2015 Certified College & nirf-2022 Rank Band: 151 - 200

Shri. Harshvardhan P. Deshmukh

Dr. G.V. Korpe Principal

Dr. Panjabrao alias Bhausaheb Deshmukh

• E-mail : shivajiscamt.office@gmail.com • Website

Ref. No. SC/8610 / 2024 /

Date: 10/01/2024

# **Declaration**

The information, reports, true copies of the supporting documents, numerical data, etc. furnished in this file are verified by our college IQAC and found correct.

Hence this certificate.

Dr. W. S. Barade IQAC Coordinator Shri Shivaji Science College

Principal Shri Shivaji Science College, Amravati.

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### **MS-DEED Level -1 Workshop:**

The Shri Shivaji Education Society, Amravati, has taken an important initiative to organize research-based workshops for teachers' teaching methods in Vidarbha, considering the new national education standards that are being implemented across the country. The decision to implement the plan developed by the Maharashtra State Faculty Development Academy (MSFDA) through the collaboration of the institution with the Indian Institute of Science Education and Research (IISER), Pune, has been taken. The campaign started with a three-day workshop held at Shri Shivaji Science College, Amravati where innovative teaching, learning, and evaluation methods were taught to science and mathematics teachers.

The opening of this workshop was attended by Dr. F C Raghuwanshi, former Dean of the Science and Technology Faculty, Sant Gadge Baba Amravati University. Dr. Vijay Thakare, Secretary of Shri Shivaji Education Society, presided over the opening ceremony, which was attended by scientists from IISER, Pune, as well as Dr. Saurabh Dubey, who was the coordinator of this project and Dr. Asim Auti, Dr. Manva Diwekar. To conduct these workshops across all the institutions of the society, Shri Shivaji Education Society, Amravati signed Memorandum of Understanding with IISER Pune on this occasion.

MS-DEED (Maharashtra State Development of Educators and Enhancement in Delivery) is a program that is designed to develop mutual relationships between the Indian Institute of Science Education and Research (IISER) Pune and the Maharashtra State Faculty Development Academy (MSFDA) under the Department of Higher and Technical Education, Maharashtra Government, in order to enhance pedagogical practices and curricula for self-disciplined programs. 109 teachers from the state of Maharashtra participated in the workshop.

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Dr. F. C. Raghuwanshi Delivering inaugural address



Enthralling experience of interaction between resource person and participants



Activities conducted and active response recorded

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Memorandum of Understanding Exchange

**Activities Under MoU** 6 | P a g e

## **Career Counselling Cell Report**

Career Counselling Cell Report of the college conducts various activities for the students to transform them into employable, self-reliant and responsible citizen. 190 students of UG and PG classes were enrolled for the cell. Following activities were conducted under the aegis of this cell –

Date	Activity	Number of students participated
22 <sup>nd</sup> Feb. 2022	Webinar on झेप भविष्यवेधी	1765
27 <sup>th</sup> April 2022	Emergency Care: First Aid Trauma Care Bystanders Training Programme	188
23 <sup>rd</sup> May 2022	Exceptional Lines of the Career उत्कर्षाच्या वेगळ्या वाटा	101
10 July 2022	FEW WINGS TO FLY HIGH IN CAREER:	121



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### Workshop on Shevanti Cultivation & Conservation

Vidya Bharati Mahavidyalaya, Amravati and Shri Shivaji Science College,
Amravati
Department of Botany
Jointly Organized with Amravati Garden Club
"Workshop on"
"Shevanti Cultivation & Conservation"
10<sup>th</sup> September 2022

#### A Report

#### Overview

Shevanti (*Chrysanthemum indicum* L.) is one of the most popular garden flowers grown in our country for its diversified beauty of colours, shapes, shades and keeping quality. On account of its origin and commercial production Asia it is called as 'Queen of East' or 'Winter Queen' as it flowers in winter. *Chrysanthemum* is a magnificent flower to embellish gardens and terraces. Everyone gets attracted towards the beautiful blooms of Chrysanthemum during winter season and wishes to have that blooms in their home garden.

#### Aims and Objectives

- 1. To increase the cultivation of different varieties of *Chrysanthemum*.
- 2. To develop interest among students towards *Chrysanthemum* cultivation and gardening.
- 3. To help students and gardeners for developing their gardening skills.
- 4. To add value to their progamme
- 5. To enhance knowledge of gardeners about different types and varieties of *Chrysanthemum*.

Department of Botany, Vidya Bharati Mahavidyalaya Amravati in collaboration with Amravati Garden Club and Shri Shivaji Science College organized a Workshop on "Shevanti Cultivation & Conservation" on 10<sup>th</sup> September, 2022. The program was started by traditional welcome by offering Kumkum Tilak to the guest at the entrance of Department of Botany. Prof. Dr. T. K. Wasnik, Vise Principal, and Head, Dept. of Physics Vidya Bharati Mahavidyalaya, Amravati was chaired the workshop. Dr. Shashank Deshmukh, Principal, Shri Shivaji College of Horticulture, Amravati, Dr. Suchita Khodke, Head Dept. of Botany Vinayak Vidnyan Mahavidyalaya, Nandgaon Kd. and the Former President of Amravati Garden Club, Amravati & Mr. Anil Bhonde, Cashier, Bank of Maharashtra, Badnera & *Chrysanthemum* Specialist were the resource persons for the workshop.

The workshop commenced with the warm welcome of all the invited guests, resource persons and participants. Dr. T. K. Wasnik, Wise Principal, Vidya Bharati Mahavidyalaya, Amravati graced the occasion with the presidential speech. The workshop was conducted in two sessions in hybrid form i.e. both online and offline mode. The first session was descriptive and the second was of hands-on (practical demonstration). In the first session, Dr. Suchita Khodke gave very useful information about suitable soil mixture, period of cultivation, diseases on *Chrysanthemum* and their management etc. through power point presentation. While in the second session, Dr. Shashank Deshmukh and Mr. Anil Bhonde demonstrated the technique of cultivation of *Chrysanthemum* in pots and shared lot of information about how to take care of

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the plantlets at different stages of growth, how to take stem cuttings for propagation. All the participants were provided with a pot, soil mixture and plantlets of *Chrysanthemum* during the practical session. All the three resource persons responded to queries of the participants during both the sessions. Participants were fully satisfied with the workshop as they interacted with resource persons personally and got some special gardening tips.

The workshop was concluded with the vote of thanks given by Dr. M. U. Ghurde, Associate Professor, Department of Botany, Vidya Bharati Mahavidyalaya, Amravati. Around 50 participants were participated in the workshp. Certificates were distributed at the end for successful participation..

#### Outcomes

- 1. The participants developed their knowledge and skills of gardening.
- 2. The participants got lots of information about varieties and cultivation of Chrysanthemum.
- 3. The participants are able to apply their practical knowledge in field.
- 4. The participants were suggested with some business ideas as there is high demand of Chrysanthemum flowers and plantlets in the market.



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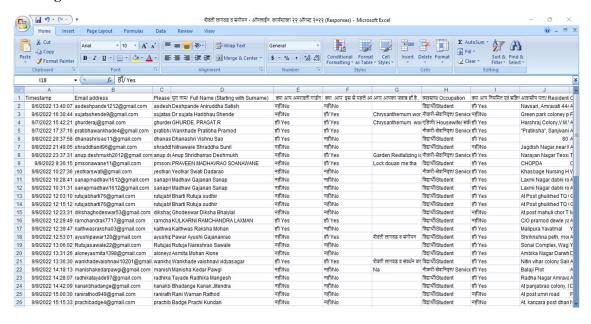


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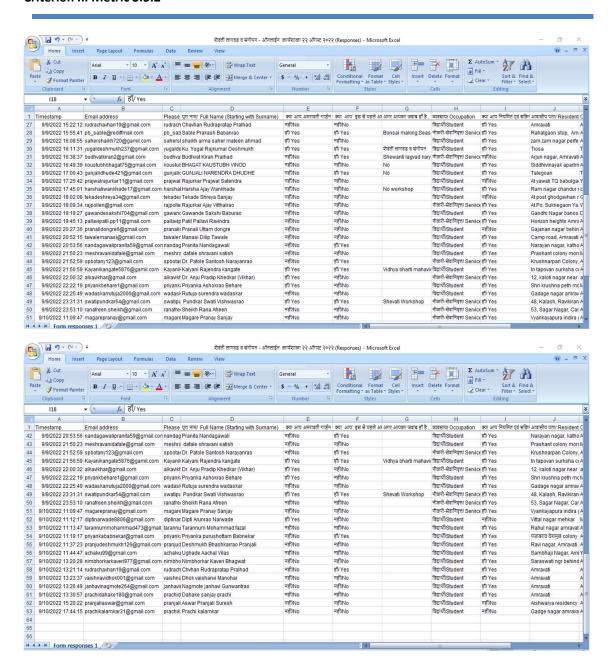
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#### **Registration List**



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#### Criterion III Metric 3.5.2



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## Workshop on Soil Preparation for Garden

### AMRAVATI GARDEN CLUB, AMRAVATI SHRI SHIVAJI EDUCATIN SOCIETY, AMRAVATI





# "Workshop on Soil Preparation for Garden"

20th May 2023 -Organized by-Amravati Garden Club and Shri Shivaji Horticulture College, Amravati

-Co-Organizers-Shri Shivaji Science College and Vinayak Vidnyan Mahavidyalya Nandgaon (Kh.)

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# "Workshop on Soil Preparation for Garden"

20<sup>th</sup> May 2023

# **Report**

Organizer: 1. Amravati Garden Club, Amravati

2. Shri Shivaji Horticulture College, Amravati

Co-Organisers: 1. Shri Shivaji Science College, Amravati

2. Vinayak Vidnyan Mahavidyalaya, Nandgaon (kh)

Number of beneficiaries: 83

#### **Announcement**



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The Amravati Garden Club Amravati in association with Shri Shivaji Horticulture College, Amravati recently organised a hybrid mode Workshop on Preparation and reclamation of Soil for Garden. The event was co-organised by Shri Shivaji Science College, Amravati and Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeshwar.

Summer season is at peak and scorching sun is testing the patience of vidarbhians, Amravati garden club as always finds an opportunity even in this testing time and planned to organise a Hybrid Workshop for the entire garden Lovers. The summer season ends with a blissful season of rain and the garden and plant lovers are always awaiting this season but before the arrival of the rain there is pretty much to be done in the backyard and garden. One of the tiresome and laborious job could be getting the soil and preparing the pots for plantation. The Workshop thus organised was primarily designed and timed to address this problem. The workshop covered all the vital and technical information regarding the type of soil, preparation of pots and reclamation of old garden soil. Composting and bio enzymes were also briefly discussed in the workhshop. The workshop was chaired by the Principal of Shri Shivaji Horticulture College, Respected Dr Shashank Deshmukh. Also was present for the workshop was Dr Dinesh Khedkar, President of Amravati Garden Club, Amravati. The resource person for the workshop Dr Suchita Khodke and Mrs Shital Chitode has conducted the workshop. The event started with the garlanding of Dr Punjabrao Deshmukh followed by welcoming of the Resource person by the hands of Principal Dr Shashank Deshmukh and Dr Dinesh Khedkar. Dr Rekha Maggirwar, Seceretary of Amravati Garden Club, Amravati supervised the event and it was hosted by Dr Gajendrasingh Pachlore, while technical assistance was provided by Dr Umesh Kanerkar, executive member of Amravati Garden Club, Amravati. In the beginning of the first session, Dr Suchita Khodke gave information and presentation on the types of soil, Nature of Soil and physical and chemical Properties of Soil. She also gave a brief idea on different potting mixture for different garden plants ranging from Rose, Anthurium, Orchids, Chrysanthemum, Succulants and Cactus etc. later in her interaction she mentioned about reducing, recycling and reusing the household waste to prepare the Compost from them. She talked about bio enzyme and various other methods which could be used on day to day basis to rejuvenate and fertilize the plants. The second session of the Workshop was conduct members of Amravati Garden club, Amravati. Lead by Mrs Shital Chitode, assistant professor at Shri Shivaji Horticulture college, Amravati. She gave a demonstration on how to make a potting mixture. During her presentation she brought all different type of planting material and showed the participants proper methods and ways of making a potting mixture specific for the type of plant. The demonstration was followed by interaction session with the participants online and offline. Mrs Shital Chitode satisfied all the queries of the participants. The program was well coordinated by the support of teaching and Non-teaching staff of Shri Shivaji Horticulture College, Amravati along with the support and logistics of executive members of Amravati Garden club, Amravati. The program got a huge response and overall 21 registration were made online while 62 registration were made offline.

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Technical Session - I Presentation by Dr. Suchita Khodke and in person

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<u>Technical Session- II: Demonstration by Mrs. Shital Chitode</u>
<u>List of Participants</u>

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## **Certificate**



YouTube Link- <a href="https://www.youtube.com/live/7lhC1XUW9Bw?feature=share">https://www.youtube.com/live/7lhC1XUW9Bw?feature=share</a>

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# घराघरात बहारदार बाग फुलविण्याचा मिळणार कानमंत्र

- गंध मातीचा सुगंध फुलांचा माती मिश्रण कार्यशाळेचे आयोजन
- अमरावती गार्डन क्लब आणि श्री शिवाजी उद्यानविद्या महाविद्यालयाचे संयुक्त आयोजन

अमरावती (विदर्भ मतदार प्रतिनिधी): ग्रीष्म ऋतू अर्थात उन्हाळा म्हणजे खरे तर उकाडचाचा व प्रचंड उन्हाचा परंतु तो तितकाच आवश्यकही असतो, विविध फुलझाडे फुलविणारे नागरिक या काळात पूर्वतयारी करित असतात. ज्यामध्ये प्रामुख्याने विचार होतो तो म्हणजे माती मिश्रणाचा, बागकाम किंवा लँडस्केपिंगसाठी निरोगी माती तयार करण्याच्या प्रक्रियेबद्दल जाणून घेण्यासाठी माती बनवण्याची कार्यशाळा हा एक आदर्श मार्ग आहे. माती बनवण्याच्या तंत्राचा अनुभव घेण्याचा आणि तज्ञांकडून शिकण्याची हि एक उत्तम संधी आहे. प्रत्येक ऋतुमानानुसार वेगवेगळे उपक्रम राबविण्यासाठी प्रसिद्ध असणारा अमरावती गार्डन क्लब अनेक कार्यशाळांच्या आयोजनावर भर देत असतो. म्हणनच बाग प्रेमींच्या मागणीला अनसरून येत्या शनिवार २० मे रोजी अमरावती गार्डन क्लब आणि श्री शिवाजी उद्यानविद्या महाविद्यालयाद्वारा गंध मातीचा सुगंध फुलांचा माती मिश्रण कार्यशाळा (प्रत्यक्ष ु आणि आभासी माध्यमातून) रामपुरी कॅम्प, स्थित महाविद्यालय परिसरात आयोजित करण्यात आली आहे.

श्री शिवाजी विज्ञान महाविद्यालय, अमरावती आणि विनायक विज्ञान महाविद्यालय, नांदगाव (खंडे.) या



महाविद्यालयांच्य<mark>ा सहयोगाने ही कार्यशाळा</mark> पार पडणार आहे. या कार्यशाळेत माती परीक्षण, मातीची रचना, माती पुनरुजीवन, माती मिश्रण आणि बायो-कंपोस्टिंग सोबतच मातीचे हेल्थ कार्ड कसे तयार करावे या विषयांवर शास्त्रोक्त माहिती देण्यात येणार आहे. यामध्ये पात्यक्षिकादारे उपस्थितांना प्रक्रियेची चांगली माहिती मिळू शके मातीमिश्रण तयार करणे कार्यशाळेत सातामत्रण तथार करण कावशाळत सहभागींना प्रत्यक्ष अनुभवाचा अधिकाधिक फायदा मिळावा यासाठी अनेक बार्बींचा समावेश करण्यात आला आहे. मातीचे आरोग्य किंवा बायो कंगोस्टिंग सारखे विस्तृत विषय घेण्यात आले आहेत. यात सहभागींनी स्वतःची माती तयार करण्यासाठी हाताशी असलेल्या सामग्रीची सूची तसेच क्रियाकलाप बागकार्य तसेच वनस्पतिशास्त्राच्या तज्ञ डॉ सुचिता खोडके, प्राध्यापक आणि विभाग प्रमुख, वनस्पतिशास्त्र विभाग, विनायक विज्ञान



Love Plants; Save Life

महाविद्यालय, नांदगाव (खंडे.) तांत्रिक मार्गदर्शन करणार आहेत. द्वितीय सत्रात घरात असलेल्या जुन्या मातीची वापर कसा करावा तसेच गुणवत्तायुक्त नवीन माती तयार करतांना मिश्रण कसे करावे? त्याचप्रमाणे मातीचे परिक्षण आणि पुनरुज्जीवन याबाबत सौ शितल चितोडे, सहाय्यक प्राध्यापक, श्री शिवाजी उद्यानविद्या महाविद्यालय अमरावती प्रत्यक्ष प्रात्यक्षिकाद्वारे कृती करून दाखविणार आहेत.

कार्यशाळेत सहभागी होण्याकरिता बागप्रेमी नागरिकांना नोंदणी करण्यासाठी

बागप्रेमी नागरिकांनी सुदृढ आणि रंगीबेरंगी फुलझाडे लावून त्याचा मनसोक्त आनंद घ्यावा, याकरिता मातीमिश्रण या महत्वपूर्ण विषयावर कार्यशाळेचे आयोजन करण्यात येत आहे.

- डॉ. शशांक देशमुख, प्राचार्य, श्री शिवाजी उद्यानविद्या महाविद्यालय, अमरावती

गार्डन क्लबच्याु.रसलर्,शली.लेा या अधिकृत संकेतस्थळावर ऑनलाईन सुविधा देण्यात आलेली आहे. अधिक माहितीसाठी कार्यशाळेचे आयोजक डॉ भारताको कार्यराजिय आयोक आ रखा मग्गीरवार (९८२२५७६००६) तसेच डॉ गजेंद्रसिंह पचलोरे, (९४२२९५७७६३) यांच्याशी संपर्क करण्याचे आवाहर गार्डेन क्लबचे अध्यक्ष डॉ.दिनेश खेडकर यांनी केले आहे.

पर्यावरण संवर्धनासाठी नवनविन संकल्पना राबविणे अत्यंत गरजेचे आहे. अनेक दशकांपासून बागकार्य करीत असतांना गाठीशी असलेला अनुभव आणि शास्त्रशुद्ध अभ्यासाच्या संयोगातून प्राप्त केलेल्या माहितीचे रुपांतर घराघरात बाग फुलविण्यासाठी झाल्यास कार्यशाळेचे फलित साधल्या जाईल. या आयोजनाचा नागरिक अवश्य लाभ घेतील अशी खात्री वाटते.

- डॉ. सुचिता खोडके, सहयोगी प्राध्यापक, विनायक विज्ञान महाविद्यालय, नांदगाव (खंडे.)

# देशोन्तती

# घराघरांत बहारदार बाग फुलविण्याचा मिळणार कानमंत्र!

# 'गंध मातीचा सुगंध फुळांचा' माती मिश्रण कार्यशाळा

अमरावती गार्डन क्लब आणि श्री शिवाजी उद्यानविद्या महाविद्यालयाचे संयुक्त आयोजन

देशोन्नती वृत्तसंकलन...

अमरावती 💻 ग्रीष्म ऋतू अर्थात उन्हाळा म्हणजे खरे तर उकाड्याचा व प्रचंड उन्हाचा; परंतु तो तितकाच आवश्यकही असतो, विविध फुलझाडे फूलविणारे नागरिक या काळात प्रामुख्याने विचार होतो, तो म्हणजे करण्याच्या प्रक्रियेबद्दल जाणून माती बनवण्याची कार्यशाळा हा एक आदर्श मार्ग आहे.

माती बनवण्याच्या तंत्राचा अनुभव धेण्याचा आणि तज्जांकड्न शिकण्याची ही एक उत्तम संधी आहे. उपक्रम राबविण्यासाठी प्रसिद्ध पद्धतशीर असणारा अमरावती गार्डन क्लब राबविण्यासाठी गार्डन क्लब सुपरिचित



अनेक कार्यशाळांच्या आयोजनावर भर पूर्वतयारी करीत असतात. ज्यामध्ये देत असतो म्हणूनच बागप्रेमींच्या मागणीला अनुसरून येत्या शनिवार माती मिश्रणाचा, बागकाम किंवा २० में रोजी अमरावती गार्डन क्लब यामध्ये प्रात्यक्षिकांद्वारे उपस्थितांना लॅंडस्केपिंगसाठी निरोगी माती तयार आणि श्री शिवाजी उद्यानविद्या महाविद्यालया द्वारा 'गंध मातीचा सुगंध फुलांचा' माती मिश्रण कार्यशाळा (प्रत्यक्ष आणि आभासी माध्यमातून) रामपुरी कॅम्प, स्थित महाविद्यालय परिसरात आयोजित करण्यात येणार आहे. प्रत्येक कार्यक्रम प्रत्येक ऋतुमानानुसार वेगवेगळे अपार मेहनत घेऊन सुनियोजित, आणि शिस्तशीर

माध्यमातूनदेखील तीच गुणवता राखल्या जाणार आहे. या कार्यशाळेत माती परीक्षण, मातीची रचना, माती पुनरुज्जीवन, माती मिश्रण आणि बायो-कंपोस्टिंग सोबतच मातीचे हेल्थ कार्ड कसे तयार करावे, या विषयांवर शास्त्रोक्त माहिती देण्यात येणार आहे. प्रक्रियेची चांगली माहिती मिळू शकेल. माती मिश्रण तयार करणे कार्यशाळेत सहभागींना प्रत्यक्ष अनुभवाचा अधिकाधिक फायदा मिळावा, यासाठी अनेक बाबींचा समावेश करण्यात आला आहे. 'मातीचे आरोग्य' किंवा 'बायो कंपोस्टिंग'सारखे विस्तृत विषय घेण्यात आले आहेत. यात सहभागींनी स्वतःची माती तयार करण्यासाठी हाताशी असलेल्या सामग्रीची सुची

बागप्रेमी नागरिकांनी सुदृढ आणि रंगीबेरंगी फुलझाडे लावून त्याचा मनसोक्त आनंद घ्यावा, याकरिता माती मिश्रण या महत्त्वपूर्ण विषयावर कार्यशाळेचे आयोजन करण्यात येत आहे.

#### डॉ.शशांक देशमुख,

प्राचार्य, श्री शिवाजी उद्यानविद्या महाविद्यालय, अमरावती

पर्यावरण संवर्धनासाठी नवनवीन संकल्पना राबविणे अत्यंत गरजेचे आहे. अनेक दशकांपासून बागकार्य करीत असताना गाठीशी असलेला अनुभव आणि शास्त्रशुद्ध अभ्यासाच्या संयोगातून प्राप्त केलेल्या माहितीचे रुपांतर घराघरात बाग फुलविण्यासाठी झाल्यास कार्यशाळेचे फलित साधल्या जाईल. या आयोजनाचा नागरिक अवश्य लाभ घेतील,

डॉ. सुचिता खोडके

सहयोगी प्राध्यापक आणि विभागप्रमुख, वनस्पतिशास्त्र विभाग, श्री विनायक विज्ञान महाविद्यालय, नांदगाव (खंडे.)

तसेच क्रियाकलाप बागकार्य तसेच वनस्पतिशास्त्राच्या तज्ज्ञ डॉ. सुचिता आयोजक डॉ. रेखा मग्गीरवार आणि प्राध्यापक विभागप्रमुख, वनस्पतिशास्त्र विभाग, श्री विनायक विज्ञान महाविद्यालय. नांदगाव (खंडे.) तांत्रिक मार्गदर्शन करणार आहेत.

अधिक माहितीसाठी कार्यशाळेचे (९८२२५७६०६६) तसेच डॉ. गजेंद्रसिंह पचलोरे (९४२२ ९५७७ ६३) यांच्याशी संपर्क करण्याचे आवाहन गार्डन क्लबचे अध्यक्ष डॉ.दिनेश खेडकर यांनी केले आहे.

Deshonnati Edition May 17, 2023 Page No. 2 Powered by : eReleGo.com

News

**Activities Under MoU** 28 | Page Six Days Hands on Training Course on "Advanced Instrumentation Techniques and their Practical Applications for PG and Research Students" Dt- 12 -17 Sept -2022

Report on Six Days Hands on Training Course on "Advanced Instrumentation Techniques and their Practical Applications for PG and Research Students"

# Organized by the Department of Chemistry

The Department of Chemistry has organized Six Days Hands on Training Course on "Advanced Instrumentation Techniques and their Practical Applications for PG and Research Students" from 12/09/2022 to 17/09/2022. Dr Shrikant A. Wadhal, Professor, Department of Chemistry took initiative as a course co-ordinator to effectively carry out the sessions of this course. In this course total 25 students participated for six days. Mr. Amol Gawande from Peaks Analytical and Research Centre, Nagpur, Dr Shrikant A. Wadhal, Mr Satish Dashore provided the students with hands on training regarding some latest instruments like HPLC, FTIR, UV- Visible, XRD, Atomic Absorption Spectrophotometer used in laboratories. This course proved to be very useful for students to get employment in various industries and Chemical laboratories and also to start their own enterprise. This certificate course definitely enhanced the student's skill in instrumental techniques in chemistry. This course was successfully organized by the Department of Chemistry.

The course was inaugurated under the guidance of Dr. G. V. Korpe, Principal, Shri Shivaji Science College, Amravati, Dr. A. S. Burghate, Head, Department of Chemistry the chief guest of the function. Mr. Amol Gawande, Scientist, Peaks Analytical and Research Centre, Nagpur, was guest of honour.

Mr. Amol Gowande discussed about his seventeen years working experience in various Industries. Mr. Amol Gawande gave Hands on Training of HPLC to the participants. Dr Shrikant A. Wadhal, Professor, Department of Chemistry and Mr. Satish Dashore, Incharge, Central Instrumentation Cell, provided hands on training of IR, UV- Visible and XRD, Atomic Absorption Spectrophotometer.

. Certificates provided to students with A, B, C grade depending on score secured (A-> =80%, A>= 65-79, B >= 50-64%, No certificate< 50%) 40% marks depends on assignment submitted and attendance and 60% marks depends on final examination score.

# This course designed for:

- PG and research students intending to work in a laboratory with scientific instrumentation.
- Students preparing for Industrial jobs after completion of PG and Ph.D. degree.
- The course designed for 40 hrs under value added course.
- Each participant paid course Fee Rs 1500/- for this course.

### The course objectives achieved:

**Activities Under MoU** 29 | Page

- To impart the required knowledge of Industrial Scope, Applications & Opportunities for Chemistry
  - To impart the required knowledge, necessary skills & to provide the exposure to modern & sophisticated techniques of analysis that are being used all over the world including industries, government & public testing labs
- Theoretical knowledge of HPLC, IR, UV-Visible, XRD, Atomic Absorption Spectrophotometer.
- Practicals of Hands on Training of HPLC,IR, XRD and UV-Visible, Atomic Absorption Spectrophotometer,
- To operate and to maintain the HPLC, AAS, UV-Visible, IR and XRD equipments.
- Instrumentation, Calibration and their practical applications in Industries.
- Wide courage has been given to Trouble shooting, Operation and method development skills.
- Perform cleaning evaluation on equipment for drug substance and residual detergents.
- Interactive sessions were engaged after completion of Hands on traing session. In these sessions interaction between participants and resource persons were held to solve difficulties regarding problems in the instrumentations.

# COURSE CO-ORDINATOR: Dr. Shrikant A. Wadhal Professor, Department of Chemistry

#### COURSE SESSIONWISE DETAILED INFORMATION:

These are the detailed information of theory and Hands on training of HPLC, IR, UV-Visible, XRD, Atomic Absorption Spectrophotometer, .

#### 1st day of Training Programme (12/09/2022)

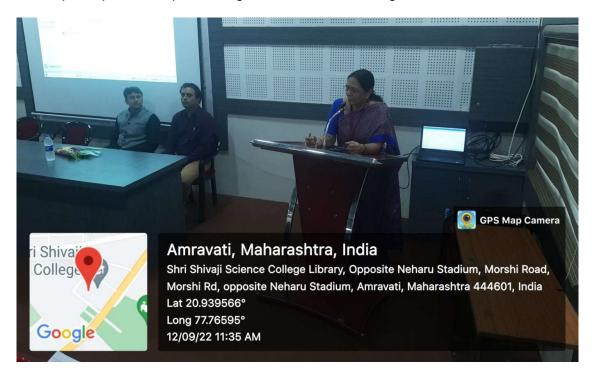
On 12<sup>th</sup> September 2022 Mr. Amol Gawande, Scientist, Peaks Analytical and Research Centre, Nagpur delivered Keynote speech on "Industrial Scope, Applications & Opportunities for Chemistry". He delivered lecture "Instrumentation & Theory of HPLC" and then he provided hands on training of HPLC to all the participants in CIC Instrumentation laboratory.

He provided information regarding following good operating practices

- Isocratic HPLC, Gradient HPLC, Chromatographic conditions, Industries work based on Chemistry.
- Reverse phase HPLC, Normal Phase HPLC,
- In Instrumental training of HPLC Mr. Amol Gawande provided
- Training regarding Column(stationary phase) and liquid (mobile phase).

**Activities Under MoU** 30 | Page

- How to inject dissolved sample into the flow path of the mobile phase.
- How to detect analytes bands, to quantitate peaks generated.
- .All these points were covered by providing individual sample to each participants and performing their hands on training.





**2nd day of Training Programme (13/09/2022)** 

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On 2<sup>nd</sup> day of Training programme Dr Shrikant A. wadhal had given hands on training to each participants about IR, FTIR instrumentation. Participants had carried out the IR practical training of samples of research students.

- 1. Preparation of sample KBr pallet.
- 2. Performance of individual IR practical of each participants of various samples through IR.
- 3. Recording of IR spectra with interpretation of IR spectrum.
- 4. Theoretical sessions on i) Theory of IR spectroscopy and ii) Interpretation of IR spectrum





3rd day of Training Programme (14/09/2022)

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On 3<sup>--</sup> day of Training programme Dr. Shrikant A. Wadhal and Mr Satish Dashore had given hands on training XRD instrumentation. Participants had carried out the practical training of samples for this instrumentation. XRD Practical demonstration and performance of Practical training to each participant





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## 4th day of Training Programme (15/09/2022)

On 4<sup>th</sup> day of Training programme Dr Shrikant A. wadhal had given hands on training to each participants about UV –Visible instrumentation. Participants had carried out the practical training of samples for this instrumentation. UV-Visible practical performance of various samples.





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# 5<sup>th</sup> day of Training Programme (16/09/2022)

On 5<sup>th</sup> day of Training programme Dr. Shrikant A. Wadhal and Mr Satish Dashore had given hands on training of Atomic Absorption Spectrophotometer instrumentation. Participants had carried out the practical training of samples for this instrumentation. AAS Practical demonstration and performance of Practical training to each participant

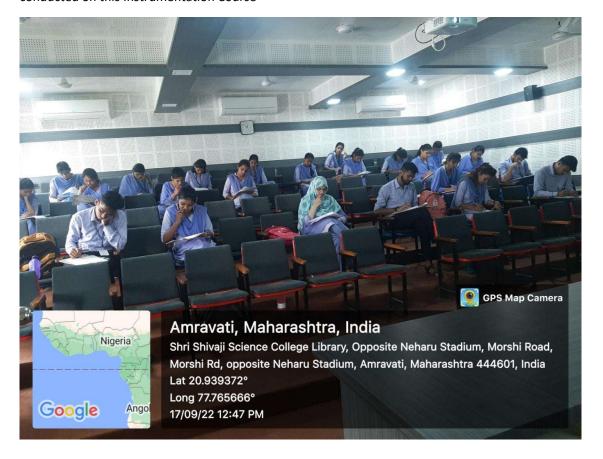




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# 6<sup>th</sup> day of Training Programme (17/09/2022)

On  $6^{\circ}$  day of Training programme Dr Shrikant a. Wadhal had given information regarding ISIS DRAW , Spectral Interpretation Problems. Participants had carried out the practical training of samples for these instrumentation. In the final session final examination was conducted on this Instrumentation Course



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### **LIST OF PARTICIPANTS**

### with

### **RESULT (AITPA-2022)**

(Grade A+ >=80%, A >= 65-79, B >= 50-64)

Sr No	Name of the Participant	Name of the Institute/College	Grade
1	Achal Chandrajyot Olambe	Shri Shivaji Science College, Amravati	A+
2	Aniket sanjayrao jawale	Shri Shivaji Science College, Amravati	A+
3	Ashwini Gajanan Goswami	Shri Shivaji Science College, Amravati	A+
4	Divya Bharat Agham	Shri Shivaji Science College, Amravati	A+
5	Dnyaneshwari Chandrakant Barabde	Shri Shivaji Science College, Amravati	A
6	Gauri anantrao gawande	Shri Shivaji Science College, Amravati	A
7	Kiran Uttamsing Rathod	Shri Shivaji Science College, Amravati	A+
8	Mahima Dnyaneshwar Chaudhari	Shri Shivaji Science College, Amravati	A+
9	Parmeshwari Vinayak Pinjarkar	Shri Shivaji Science College, Amravati	A+
10	Pradnya Vinayak Dongardive	Shri Shivaji Science College, Amravati	A+
11	Prajakta Rajendra Thakare	Shri Shivaji Science College, Amravati	A+
12	Prajkta Vitthalrao Raut	Shri Shivaji Science College, Amravati	A+
13	Pratik Sharad Bhadange	Shri Shivaji Science College, Amravati	A
14	Rajlakshmi Dattatray Dhawad	Shri Shivaji Science College, Amravati	A+
15	Sakshi Pramod Bhande	Shri Shivaji Science College, Amravati	A+
16	Sameera Mohd Waseem Ahmed Fatima	Shri Shivaji Science College, Amravati	A
17	Sanika Arunrao Motharkar	Shri Shivaji Science College, Amravati	A+
18	Shilpa vinayak Gomase	Shri Shivaji Science College, Amravati	A+
19	Shreyash Jawake	Shri Shivaji Science College, Amravati	A+
20	Shruti Ranjit Deshmukh	Shri Shivaji Science College, Amravati	A+
21	Shubham Pravinrao Mankar	Shri Shivaji Science College, Amravati	A+
22	Siddhi Ashok Bhonkhade	Shri Shivaji Science College, Amravati	A+
23	Vaishnavi Anil Rahate	Shri Shivaji Science College, Amravati	A+
24	Vaishnavi Dnyaneshwar Hatwar	Shri Shivaji Science College, Amravati	A+
25	Vaishnavi Gopal Moghe	Shri Shivaji Science College, Amravati	A



Dr. Shrikant A. Wadhal

Dr. A.S. Burghate

Course Coordinator

Head ,

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### PERMISSION LETTER

To,

The Principal,

Shri Shivaji Science College Amravati

Subject: To seek permission to organize Hands on Training Course on "Advanced Instrumentation techniques and their Practical Applications for UG and PG students" Through: Dr S. K. Rithe, Head, Department of Chemistry

Respected sir,

With reference to the above subject I would like to request you to grant permission to organize Hands on Training Course on "Advanced Instrumentation and their Practical Applications for UG and PG students" by Department of Chemistry, Shri Shivaji Science College, Amravati from 12<sup>th</sup> September to 17<sup>th</sup> September 2022.

Thanking you

Date: 16/08/2022

Dr. Shrikant A. Wadhal

Co-ordinator,

Professor,

Department of Chemistry

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### **Brochure of Course**



Shri Shivaji Education Society, Amravati's
Shri Shivaji Science College, Amravati

Accredited by NAAC with 'A' Grade Identified as UGC-CPE, DST-FIST & SGBAU-Lead College Shivaji Nagar, Amravati, MS - 444603



Six Days Hands on Training Course on Advanced Instrumentation Techniques and Their Practical Applications for PG and Research Students



Duration: 12th to 17th September, 2022

#### Course Description:-

Now a day candidates with core analytical skills, sound knowledge and practical significance and troubleshooting of different sophisticated analytical instruments are appreciated and required by all the research, manufacturing, processing and contract manufacturing industries as well as government & public testing labs.

This course gives huge scope and ample opportunities in different industries like Food, pharmaceuticals, agrochemicals, fine chemicals, cosmetics, oil and paints perfumery, beverages, rubbers, plastics, clinical research, forensic, public testing labs, etc. . Dr. Shrikant A. Wadhal, course coordinator and Mr. Amol Gawande, Scientist, Peaks Analytical and Research Centre, Nagpur, Mr. Satish Dashore will provide hands on training regarding some latest instruments like HPLC, Atomic absorption, Spectrophotometer, IR, UV-VIS, XRD used in laboratories.

#### This course is designed for:

- a) PG and research students intending to work in a laboratory with scientific instrumentation.
- b) Students preparing for Industrial jobs after completion of PG and Ph.D. degree.
- c) The course is designed for 40 hrs under value added course.

#### **COURSE LAYOUT**

(1) Course will begins with scope, applications and opportunities of Instrumental techniques (HPLC, AAS, IR, XRD,UV-Vis). (2) Instrumentation, theory, calibration, operation, trouble shooting, practical demonstration of HPLC. (3) Instrumentation, theory, calibration, operation, sampling practical demonstration, data collection of Atomic absorption, Spectrophotometer. (4) Instrumentation, theory, calibration, pallate formation, practical demonstration of Infra Red spectrophotometer. (5) Instrumentation, theory, calibration, operation, practical demonstration, data collection of XRD. (6) Instrumentation, theory, calibration, operation, practical demonstration with examples of UV-Visible. (7) Explanation of chemical drawings of reactions through Chem Draw, Isis Draw in MS Word. 8. Good laboratory practices, good chromatographic practices

COURSE TYPE: Value Added Course

COURSE LEVEL: PG and Research Students.

#### 1. Course Objectives:-

- 1) To impart the required knowledge of Industrial Scope, Applications & Opportunities for Chemistry
- 2) To impart the required knowledge, necessary skills & to provide the exposure to modern & sophisticated techniques of analysis that are being used all over the world including industries, government & public testing labs.
- 3) Theoretical knowledge of HPLC, Atomic absorption, Spectrophotometer and IR, UV-Visible, XRD equipments.
- 4) Practical knowledge on HPLC, AAS and IR, XRD and UV-Visible equipments.
- 5) To operate and to maintain the HPLC, AAS and IR and XRD UV-Visible equipments.
- 6) Instrumentation, Calibration and their practical applications in Industries.
- 7) Wide courage will be given to Trouble shooting, Operation and method development skills.
- 8) Perform cleaning evaluation on equipment for drug substance and residual detergents.
- 9) Additionally, the course provides introduction to ChemDraw, Isis Draw software for chemical drawings in MS Word.

### 2. Instructional strategies:-

- $\cdot \ Submission \ of assignments \ after \ completion \ of session.$
- $\cdot Interactive \ session \ of \ students \ and \ resource \ person \ so \ as \ to \ solve \ difficulties \ of \ students.$

### 3. Instructional Material:-

- · Power point presentations related to the theory of instrumentations.
- $\cdot \ Videos\ of\ practical\ demonstration\ of\ Gas\ chromatography, HPLC\ and\ IR\ equipments.$
- · Soft copies of notes related to the topics covered.
- · Chem Draw, Isis Draw software for chemical drawing.

#### 4. Summary:-

Upon successful completion of this course, the students will be able to:

- · Rectify simple problems with sample preparation or data acquisition.
- · Operate the HPLC, AAS, XRD, IR, UV-Visible instruments independently.
- · Perform the trouble shooting in HPLC.
- $\cdot Create \, sample \, reports \, including \, data \, from \, the \, HPLC, AAS, \, instrument, \, XRD, IR, \, UV-Visible \, equipments. \, AAS \, instrument, \, AAS \, instrument,$

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### Shri Shivaji Education Society, Amravati's Shri Shivaji Science College, Amravati

Accredited by NAAC with 'A' Grade Identified as UGC-CPE, DST-FIST & SGBAU-Lead College Shivaji Nagar, Amravati, MS - 444603



### Six Days Hands on Training Course on Advanced Instrumentation Techniques and Their Practical Applications for PG and Research Students



- · Know the applications of these instruments in various Industries which are helpful in job opportunity.
- · Set up their own laboratory for business purpose.
- · Draft a section of a resume to include this hands on training course with specific instruments.
- · Draw chemical drawings of reactions through ChemDraw, Isis Draw in MS Word related to their project work of PG and research work of Ph.D. degree.

#### 5. Evaluation Strategies:-

- · Certificates will be provided to the students with A, B, C grade depending on score secured.(A>90%, B>80%, C>60%)
- · 40% marks will depend on assignment submitted and 60% marks will depend on final examination score.

#### 6. Duration of the Course:-

- · The duration of the course is (12/09/2022 to 17/09/2022).
- · Demonstration of practical, hands on training and discussion through interactive session after completion of each session.

### - Course Session Plan -

#### Monday, 12.09.2022

11.00 - 12.00 p.m. Inauguration & Theoretical session of HPLC

12.30 - 01.00 p.m. Tea Break

01.00 - 05.00 p.m. Hands on Practical session of HPLC

#### Tuesday, 13.09.2022

11.00 - 12.00 p.m. Theoretical session of trouble shooting, IR

12.30 - 01.00 p.m. Tea Break

01.00 - 05.00 p.m. Hands on Practical of IR

### Wednesday, 14.09.2022

11.00 - 12.00 p.m. Theoretical session of XRD

12.30 - 01.00 p.m. Tea Break

01.00 - 05.00 p.m. Hands on Practical session of X-Ray Diffraction technique (XRD)

#### Thursday, 15,09,2022

11.00 - 12.00 p.m. Theoretical session of UV VISIBLE spectroscopy

12.30 - 01.00 p.m. Tea Break

01.00 - 05.00 p.m. Hands on Practical session of UV VISIBLE spectroscopy

#### Friday, 16.09.2022

11.00 - 02.00 p.m. Hands on training and Quiz and Assignment Submission

02.00 - 03.00 p.m. Tea Break

03.00 - 05.00 p.m. First Examination

#### Saturday, 17.09.2022

10.00 - 12.00 p.m. Theoretical session of Atomic Absorption spectrophotomete

12.00 - 01.00 p.m. Tea Break

01.00 - 04.00 p.m. Hands on Practical session of Atomic Absorption

spectrophotometer

04.15 - 05.15 p.m. Final Examination

05.15 - 06.15 p.m. Valedictory Function

### Organized by Department of Chemistry

- Contact for Details -

Dr. Shrikant A. Wadhal

Mob. +91 98507 85870 Email : shrikrish123@gmail.com

- Course to be Conducted by -

Dr. G. V. Korpe Principal

Dr. S. K. Rithe Head of the Department

Dr. Shrikant A. Wadhal Course Coordinator

> Last Date of Registration : 11th September, 2022

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### **ATTENDENCE OF PARTICIPANTS**

### SHRI SHIVAJI SCIENCE COLLEGE, AMRAVATI P. G. DEPARTMENT OF CHEMISTRY

SIX DAYS HANDS ON TRAINING COURSE ON ADVANCED INSTRUMENTATION TECHNIQUES & THEIR PRACTICAL APPLICATION FOR PG & RESEARCH STUDENTS

Sr.No.	Name of Student	12/9/22	13/9/22	14/9/22	15/9/22	16/9/22	17/9/22
1	Achal Chandrajyot Olambe	Adambe	Sambe	*Jambe	Aclomb C	Agonb &	Aclambe.
2	Aniket sanjayrao jawale	A 87	AST	A8 -	A 95	AST	AST
3	Ashwini Gajanan Goswami	proswami	Ams (Dami	Anolumni	Ano (com	Andromi	An (min)
4	Divya Bharat Agham	Bilgham	Bogham.	Balaham	Blaham	Baham.	Degham
5	Dnyaneshwari Chandrakant Barabde	Burge	Oxiell	Barrapal	Burgh	(Britaly )	Bearley
6	Gauri anantrao gawande	Barande.	Auonda.	Pana	Pans	Pana	POTENCE
7	Kiran Uttamsing Rathod	KINON	Klach	KITCH	KATOM.	Kludyer	Klaan.
8	Mahima Dnyaneshwar Chaudhari	(Male	aret.	OIL.	artely,	mdi.	COACHA.
9	Parmeshwari Vinayak Pinjarkar	Phyonkar	10 mjont ar	Pinionar	Pinyantar	Phylankar	Phonen
10	Pradnya Vinayak Dongardive	Pangaedive	Rengardive	Bengerselive	Dongarchive	Bongardive	Dansardive
11	Prajakta Rajendra Thakare	Theka	PHILIP	This	FINES	Auto	Filks.
12	Prajkta Vitthalrao Raut	Rout	Rout	Raut	Rout	· Raut	Prant.
13	Pratik Sharad Bhadange	P.S. Bhadangs	P.S. Bhadangs	P.S. Bhadange.	P.S. Bhadang	P.S. Bhadange -	
14	Rajlakshmi Dattatray Dhawad	Réglatal	Raylein	Reglate	daylot	Railabel	Railato
15	Sakshi Pramod Bhande	Phone I	Dholela	0-	02	0	
16	Sameera Mohd Waseem Ahmed Fatima	Shi	Stin	Spo	3/20	Sto	8/20
17	Sanika Arunrao Motharkar	& A. Mothanka	8.A. Motharkar	-8-A Mothanka	INS A Mothak	n & A Motharke	1 & A Mothar
18	Shilpa vinayak Gomase	6/erroce	Strong	8/xmexi	- A/somores	- Alemos	& formes

19	Shreyash Jawake	(S) wells					
20	Shruti Ranjit Deshmukh	1	Quite	Stake	Sumpe	Squite	Dure
21	Shubham Pravinrao Mankar	Ceshoneth	Seshmulah.	Seshmulch	Fighmuch.	geshmulety.	Suhmukt
22	Siddhi Ashok Bhonkhade	Flam	Sohn	Stuhne	Shun	Show	Subus
23	Vaishnavi Anil Rahate	Sorklade	Forthale.	Sontade.	Bondehade	Sonblade.	Honk back
24	Vaishnavi Dnyaneshwar Hatwar	Rahate.	Dahate.	Wahate.	Wahate	Wahale.	Warrente.
25	Vaishnavi Gopal Moghe	Deaton	·oloha	Deatur	olate	Diatros	2/ut
26	Rushikesh Panday	(magle	Amogle.	amogle.	Bright.	amagle.	Grade
27	Table 1	Myrana	diblipo				
28							
29							
30							

(Course co-ordinator)

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Shri Shivaji Education Society, Amravati's
Shri Shivaji Science College, Amravati

Accredited by NAAC with 'A' Grade Identified as UGC- CPE, DST- FIST & SGBAU- Lead College Shivaji Nagar, Amravati, MS - 444603



Six Days Hands on Training Course on Advanced Instrumentation Techniques and Their Practical Applications for PG and Research Students

**Duration: 12th to 17th September, 2022** 



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### **Placement Drive**

Year	2022-2023
Number	02

Sr. No	Organization with which MoU is signed	Name of the institution/industry/corp orate house	Year of signin g MoU	Durati on	List the actual activities under each MoU	Number of students/te achers participati ng under MoUs
1	SIMAK IT Pvt. Ltd. Amravati	Core Project Engineers and Consultant Pvt. Ltd. Amravati	2023	5	1. Placement Drive	24/03
2	RATTANINDIA POWER LTD, A THERMAL POWER PROJECTNANDGAONP ETH MIDC, AMRAVATI	Amravati Municipal Corporation, Amravati	2023	5	Placement Drive	28/03

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### Internship

# Internship Program at Clue4Evidence Forensic Lab., Bangalore for B.Voc Forensic Science Students

Report on Internship regarding Forensic Science.

Date: 5th April to 5th May of year 2022

Submitted by: 2<sup>nd</sup> Year B.Voc Forensic Science students Department of Forensic Science

Shri Shivaji Science College, Amravati.

### Table of Contents

- Acknowledgement
- Information about the company
- Information about the internship position
- Description of internship experience
- Pictures of the activities during the internship
- Conclusion

### Acknowledgement

We, 17 students of B.Voc Forensic Science, undertook this internship/training under the guidance of Mr. Phaneendar B.N. and Clue4 Evidence Foundation. We are grateful to their entire staff for their patience and assistance during our training under them. It was a unique and memorable experience for all of us as the internship program involved training of four different branches of Forensic Science.

### Information about the company

Clue4 Evidence Forensic Investigations Private Limited (Clue4 Evidence Forensic Lab) is a dedicated corporate entity and has been recognized as the competent Forensic Laboratory in the field of testing and investigations. Incorporated in the year 2009 with the corporate office at Bangalore, Clue4 Evidence Forensic lab has been efficient in delivering various Forensic services to several clients across India and across the globe. In the past years of experience, the company has contributed in educating the general public and forensic science students through numerous Workshops, Seminars, Training programs and Certifications. The Managing Director, Mr. Phaneendar B.N. has been bridging the gap between the law and evidence, facilitating the proper adjudication of the trials.

Information about the internship position

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We joined Clue4 Evidence internship program for the training and experience at handling and analyzing Forensic evidences of various nature. Central focus was on performing activities such as accurate handling of evidences and learning while witnessing their analysis performed by the staff of forensic experts.

### Description of the Internship experience

The internship of four weeks was divided in a way that each week was dedicated to a specific branch of Forensic Science. The first week was dedicated for Handwriting and Signature Analysis, in which we learned about the features of Handwritings and signatures, crucial for cases of fraudulent documents. In the second week, we learned about Fingerprints, understood their minute yet extremely important details for the purpose of analyzing them efficiently. In the third week, we learned about Security Features of Currency. We were introduced to various security features of currency that aids in the investigation of Fraud Currency. The fourth and last week was all about Forensic Psychology. We witnessed Polygraph test and learned its mechanism as well as various aspects regarding the criminal psychology.

### The tasks we undertook included:

- 1. Comparison of signatures by marking every feature and presenting a thorough report of it.
- 2. Development of Latent Fingerprints.
- 3. Collections of fingerprints from various surfaces.
- 4. Analyzing Currency notes and checking their Security features.
- 5. Creating accurate questionnaires for the Polygraph tests.

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### Pictures of the activities during Internship



Fingerprint development and collection by Tape Lifting Method

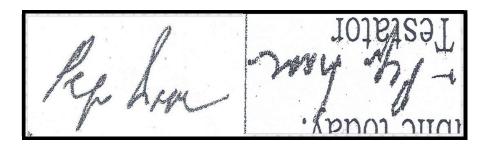


Collection of Fingerprints using Black powder on a white surface

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Observing the latent fingerprints using alternate light sources.



Comparison of authentic and fraudulent signature.



Observing Security Features of Currency.

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Performing Polygraph test



All us interns at Clue4 Evidence, Bangalore, India.
Conclusion

From our experience at Clue4 Evidence internship, we got a better understanding of how the evidences are handled and analyzed and how Forensic world works. The tasks that we performed helped us to gain an abundance of knowledge as we got to perform each task at our own pace under the guidance of our instructors. Going to a new state helped us all with our soft skills as well. Overall, we found this internship experience to be extremely positive, as the skills that we learned during this time will help us with our respective careers and in our daily lives too.

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1 month Internship Certificate of Ms. Ashtami S. Rathod.



1 month Internship Certificate of Ms. Snehal S. Dhadwe.

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1 month Internship Certificate of Mr. Prajwal N. Kalamkar.



1 month Internship Certificate of Mr. Tejas P. Zamre.

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Internship Programme at Clue4Evidence Forensic Lab., Bangalore for B.Voc Forensic Science Students

# INTERNSHIP REPORT CLUE4 EVIDENCE FORENSIC LAB

Bangalore 2023 (Batch 4)

#### **CLUE4EVIDENCE**

Clue4 Evidence Forensic Investigations Private Limited (Clue4 Evidence Forensic Lab) is a dedicated corporate entity and has been recognized as the competent Forensic Laboratory in the field of testing and investigations. Incorporated in the year 2009, Clue4 Evidence Forensic Lab is now the most preferred Forensic partner for various high-profile cases which are being investigated by Police and special investigation agencies across the Country. Having the corporate office at Bangalore, Clue4 Evidence Forensic Lab has been efficient in delivering various Forensic services to several clients across India and across the globe. The company has also been successful to offer Forensics as a tool to prevent the frauds and not just to investigate and has earned the clients from various sectors including banking, finance, insurance, housing development corporations, law enforcement (police and courts), educational institutions, corporate and individuals across the globe.

In the past several years of experience, the company has contributed to educate the people through numerous Workshops, Seminars and Certifications. The reports submitted by Clue4 Evidence have been key evidence in passing judgement in several cases. Today, Clue4 Evidence Forensic Lab is known for its credibility and efficiency and as an organisation; the organisation strive to offer the forensic needs of this society with the same spirit.

### Mission of the company

"To be the provider of comprehensive & integrated forensic service with a reputation for ENTHUSISASTIC service, EFFECTIVE quality, EFFICIENT reporting and timely EXPERT advice"

Vision of the company

"To be the ultimate experts in the field of forensics and to offer fraud and risk management services and be the source for justice"

### **Explanation or Methodology of the work**

### **Forensic Science**

Forensic science can be defined as the scientific discipline which is directed towards the recognition, identification, individualization, and individualization of physical evidence by

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the application of principle and methods of natural science for the purpose of administration of criminal justice system.

Forensic science is derived from the Latin word "forensis" meaning 'forum'. It is the application of science in the field of law. Also known as criminalistics. The role of forensic science is inevitable in the field of investigation. Forensic scientists collect, preserve, and analyse all the pieces of evidence encountered in a crime scene. The evidence includes blood, hairs, fingerprints, footprints, bullets, fibres, etc. It is a vast field that makes use of a variety of techniques like DNA, fingerprint, bloodstain pattern, firearm, ballistic, and toxicological analysis.

### FUNDAMENTAL LAWS IN FORENSIC

Law of Individuality: "Every object whether natural or man-made has a distinctive quality or characteristic in it which is not duplicated in any other object".

Law of probability: "All identifications (definite or indefinite), made consciously or unconsciously on the basis of probability."

Locard's exchange principle: This principle was stated by French scientist -Edmond Locard. "As soon as two things come in connection with each other, they mutually interchange the traces between them".

Law of analysis: "The quality of any analysis would be better by collection of correct samples and its correct preservation in the prescribed manner".

Law of circumstantial facts: "Facts cannot be wrong; they cannot lie not wholly absent but men can and do".

Law of comparison: The law state that "Only the likes can be compared".

Law of progressive change: "Everything changes with the passage of time and nothing remains constant".

### About the internship

The duration of internship was of 1month. The internship included disciplines which were

- Questioned document
- Fingerprinting
- Cyber security
- Polygraph

These four disciplines were taught over the duration of 1 month. Firstly, a proper introduction to the topic was given which was followed by examination of evidences for live cases. Students from our batch taken to court visits along with guest lecture with the director of Clue4 evidence, Mr.Phaneendar B.N. the students took internship under the guidance of Internship co-coordinator of Clue4 evidence, Mr. Harsha. N. R. Along with court visits students also actively participated in examining evidences which were from ongoing cases.

The working time of our batch was from 9AM to 12PM. Everyday a new topic from the above-mentioned disciplines were taught by the coordinator. We were given brainstorming activities about the disciplines taught to us to test our understanding of the discipline.

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Throughout the whole training program, we also performed various partials which are mentioned below: -

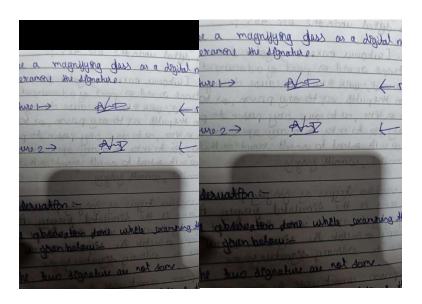
1. to study the security features of currency, note: -

There are various security features present on the Indian currency note, not all of them are disclosed to the public because it would make it more difficult to identify a



### 2. To study simulated forgery: -

There various types of forgery, the most common one is the simulated forgery. A simulated forgery is one in which the attempt is made to copy or imitate the signature of another as is done in ordinary signature forgery.



### 3. To study traced forgery: -

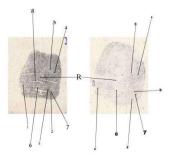
Document by tracing the handwriting or signature is known as a traced forgery. Trace forgery is the crudest form of forgery

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4. to examine and verify whether the signature of Mr. C.K. Narayanappa" which is marked as D1-D6and K1-K9 is authored by same person or not.



5. To examine and report whether the disputed (D1) and known (K1-K2) Fingerprint Present in above mentioned documents is authored by the same.



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6. How to collect fingerprints on a police Fingerprint form.





Some Students got the opportunity to work on live cases of Questioned Document in which they were able to learn about identifying a forged document along with ink analysis.

### **Court visit at Hassan District Court**

- A Court visit to Hassan District Court as an expert witness was made by the director of Clue4evidence Mr. Phaneendar B.N in a disputed signature case on 10<sup>th</sup> July 2023
- The learning outcome from court visit was to show various court practices and the role of forensic investigator as an expert witness.
- The expert witness answers the question asked by the questioner in the cross examination.
- The questioner asks questions on how the examination was done, who did it and so on.

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### **Pictures from Bangalore Internship**



Students of B.VOC Forensic Science at Clue4 Evidence Forensic Laboratory Bangalore

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Picture 1



Picture 2: Students at Hassan District Court with Director of Clue4 Evidence

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Picture 3
Seminar From Seniors at Clue4 Evidence On Polygraph



Picture 4

### Internship Co-Ordinator Showing A 500Rs Indian Currreny Note under UV Light

### CONCLUSION

From our experience at Clue4 Evidence internship, we got a better understanding of how the evidences are handled and analysed and how Forensic world works. The tasks that we performed helped us to gain an abundance of knowledge as we got to perform each task at our own pace under the guidance of our instructors. Going to a new state helped us all with our soft skills as well.

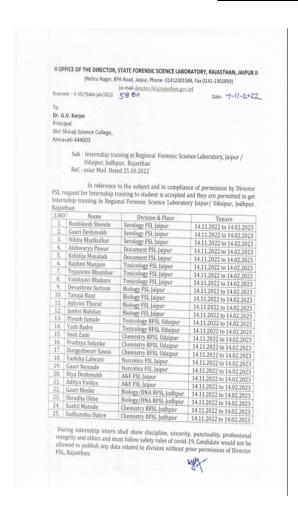
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## Internship Program at State Forensic Science Laboratory, Jaipur, Rajasthan for B.Voc Forensic Science Students

### **Permission Letter**





### RAJASTHAN INTERNSHIP REPORT 2022-23

### INTRODUCTION TO FORENISC LABS IN RAJESTHAN

Dawn of nineteenth century brought a lot of technological & industrial changes in every aspect of life along with changes in nature of crime & modus operandi. Forensic science labs were established to counter these changes and to incorporate science & technology in investigation in changing scenario of crime to help investigation agencies in solving crime and increasing conviction rate. In the wake of same purpose Forensic Science Laboratory Rajasthan had been started in the police headquarter with Document and Photo Division in the 1959. First Technical Director had been appointed in 1970.

Directorate of Forensic Sciences comprises State-wide network of seven forensic labs - one each at each divisional headquarter and 34 Mobile Forensic Units - one each at each Police

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District to deliver scientific services for establishing elements of crime at crime scenes and identifying criminals.

The State Forensic Science Laboratory, Rajasthan has multi-disciplinary State of Art Laboratory to provide scientific support and services to the investigation of crime. The examination of material objects forwarded by Police, Courts and other Investigating agencies are carried out in the Laboratory and examination reports are prepared by applying advanced scientific technology and scientific Instruments, which is further submitted as main scientific evidence in the court of Law.

The State FSL Jaipur has examination facilities in the field of Physics, Cyber Forensics, Ballistics, Biology, Serology, DNA, Chemistry, Narcotics, Arson & Explosive, Documents, Toxicology and Photo Divisions with state of art laboratory. Forensic Training Research Institute is also established in the premises of the SFSL Jaipur, in which training facilities would be developed for Forensic Scientists, Judicial Officers, and Law Enforcement Officers. The State Forensic Science Laboratory Rajasthan has its Regional Laboratories located at Jodhpur, Udaipur, Kota, Bikaner, Ajmer and Bharatpur with examination facilities in 5, 5, 4, 5, 3 and 4 forensic fields respectively.

In order to ensure speedy and effective Crime Scene Examination and to ensure proper and correct evaluation of clue materials from the scene of crime, there are 34 District Mobile Forensic Units (DMFU), in which two DMFU at Jaipur district and one DMFU at each district.

### MISSION & VISION

To make judicial process more effective by providing infallible scientific evidences with the help of modern cutting-edge technology. Continuous technological strengthening of forensic science laboratory with the modern cutting-edge technology in wake of increasing resources, skill, astuteness and sagacity of criminal so that culprits can positively be identified. Acquaint the police, prosecution and judiciary about the importance of physical scientific evidences so that the justified and higher conviction rate may be achieved."

### STUDENT'S EXPERIENCE AT THE INTERNSHIP

Final year students of B.VOC Forensic Science received a remarkable opportunity for an internship at Forensic Science Laboratory (FSL) under the Directorate of Forensic Science Services (DFSS) Rajasthan. The tenure of the internship was 3 months long (14 Nov 2022 – 14 Feb2023). The students were distributed into batches at various regional forensic science laboratories (RFSL) within the Rajasthan region. During the period of this internship, students got to learn about the working and functioning of government laboratories. It was an incredible experience for the students as hands-on working on the instruments and practical application of the techniques was encountered.

Students received a benefit of working at various divisions of forensic laboratory – Biology, Serology, DNA, Toxicology, Chemistry, Document. Study and personal exposure to the examination process of various case evidences was also undertaken by experts of the training division.

Receiving of the case – case file verification/cross examination – examination of exhibits – preparation of case report – dispatch of the case file.

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All students were given certificates to appreciate the work they have done during the period of internship.

Everyday students had to report at the labs at 9.45AM and had to work till 5pm.

Two of the students at the Rajasthan internship got the chance to work alongside forensic officers in their researches. Appreciating the efforts of the students they were mentioned as coauthors in the officers' research paper as they also had a fair share of contributions in the researches.

### PICTURES FROM THE INTERNSHIP



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### 3 month Internship Certificate of Mr. Aditya Vaidya



3 month Internship Certificate of Nemade

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### DIRECTORATE OF FORENSIC SCIENCE LABORATORIES, RAJASTHAN, JAIPUR Home Department Government of Rajasthan,

D.No. V -15(7) Labo/ Jan 2012 Part-I/ 914

Date: 14.02.2023

### Certificate of Internship Training

This is to certify that Ms. Gauri Deshmukh from Shri Shivaji Science College, Amravati (Maharashtra) has successfully completed the internship training in Serology Division from 14.11.2022 to 14.02.2023. She has submitted her internship report. We wish her all the best for her future.

Dr. Sanjay Sharma Director State Forensic Science Lab, Rajasthan, Jaipur

### 3 month Internship Certificate of Ms. Gauri Deshmukh



### DIRECTORATE OF FORENSIC SCIENCE LABORATORIES, RAJASTHAN, JAIPUR Home Department Government of Rajasthan,

D.No. V -15(7) Labo/ Jan 2012 Part-I/ 907

Date: 14.02.2023

### **Certificate of Internship Training**

This is to certify that Ms. Devashree Surjuse from Shri Shivaji Science College, Amravati (Maharashtra)has successfully completed the internship training in Biology Division from 14.11.2022 to 25.12.2022 & 10.01.2023 to 14.02.2023. She has submitted her internship report. We wish her all the best for her future.

Dr. Sanjay Sharma Director State Forensic Science Lab, Rajasthan, Jaipur

3 month Internship Certificate of Ms. Devashree Surjuse

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### **Guest Lecture on Teacher's Day**

### Shri Shivaji Science College, Amravati Department of Geology Guest Lecture on Teacher's Day 2022-23

Department of Geology, Shri Shivaji Science College, Amravati organized a Guest Lecture under the MOU with Crustal Geotechnics India dated 5th September 2022. Mr. Manoj Tupe, Project head Crustal Geotechnics India delivered an Online guest lecture from field regarding on job filed work procedure, the methodology used in on site field works. He also demonstrated the students regarding core log drilling in the field, various logging equipment used for core log drilling, the work of Geologist while a field core logging is under process. He also explained various drill bits used for core logging and where they are used. He taught students about coal core logging and the need of logging for reserve estimation of any ore. He also taught the various grid patterns used for core logging planning and its importance. He taught students about how the core log sample shall be examined on field by a Geologist along with various ways to distinguish the coal types in field.

Students apricated the on-Job field work experience shared by Mr. Manoj Tupe and got inspired for the work of a Geologist in the Field Jobs.

Date: 6/9/2022

Place: Amravati Head

Department of Geology Shri Shivaji Science College Amravati

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### Shri Shivaji science college, Amravati Department of Geology

### Student List

	10	
Sr no	Name of student	Class
1	Mahesh Uke	B.Sc II
2	Swami	B.Sc III
	Deshmukh	
3		
4	Ansh Bhoware	B.Sc II
5	Kaivalya	B.Sc II
	Hatwar	
6	Nirjala Dawande	B.Sc I
7	Parth Gubre	B.Sc I
8	Payal Dhawale	B.Sc I
9	Pornima Thak	B.Sc I
10	Pranav khangar	B.Sc I
11	Prathamesh	B.Sc I
	Sawale	
12	Riya Marotkar	B.Sc I
13	Sarvesh Jade	B.Sc II
14	Shreya	B.Sc I
	Avinashe	
15	Tanmay Talokar	B.Sc II
16	Vedanti	B.Sc I
	Sonparote	
17	Vishaka Tayade	B.Sc I
18	Rani Mohod	B.Sc I
19	Minakshi	B.Sc I
	Wagare	
20	Aditi Yadav	B.Sc I
21	Sanika Thete	B.Sc I
22	Ashu Bhujbal	B.Sc I
23	Roshan Jawanjal	B.Sc I
24	Anudh kadu	B.Sc I
25	Ankit Dahikar	B.Sc II
26	Gayatri Shelke	B.Sc I
27	Pranay	B.Sc I

	Sukhadave	
28	Samiksha Gouradipe	B.Sc III
29	Apeksha Talan	B.Sc III
30	Mamta Sune	B.Sc II
31	Vedant Wankhade	B.Sc III
12	Vivek Gaikwad	B.Sc III
33	Nandini Asopa	B.Sc I
34	Pratik Chaudari	B.Sc III
35	Shrikrushana Gayan	B.Sc II
66	Dewang Sagane	B.Sc II
37	Chaitanya Pole	B.Sc II
88	Mohini Dhore	B.Sc I
39	Mahesh Uke	B.Sc II
10	Abhay Bhende	B.Sc III

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"One day hands on training on Groundwater Monitoring Hands on training"

# Department of Geology and Environmental Science Report on

### One Day Ground Water Monitoring Hands- on Training

Department of Geology and Department of Environmental Science of Shri Shivaji Science College, Amravati had organized One day hands on training on Groundwater Monitoring in and around College Campus, Under the guidance of the members of Foundation for Ecological Security (FES). Above Mentioned Training was provided by Shri.S.K.Paunikar, Assistant Professor; Shri K.P.Tiwari, Assistant professor (Ad-Hoc), Department of Geology, Shri Shivaji Science College, Amravati and were accompanied by Dr.S.P.Ingole, Head and Associate Professor; Shri.V.D.Bute, Assistant Professor, Department of Environmental Science, Shri Shivaji Science College, Amravati dated on 18/10/2022 in and around our College campus. Training was provided to B.Sc. Geology I, II, III year students and MSc I, II year Environmental Science students.50 students from B.Sc. I, II, III Geology and 27 students from M.Sc. I, II, attended the above mentioned One day Training of Groundwater Monitoring. Naapo Jal Bachao kal is a part of participatory Campaign to map, Measure wells accros the villages in India to enhance the collective understanding of Groundwater.

Workshop by Foundation For Ecological Securities (FES), Gujarat was provided dated 06/10/2022 for the students where students got practical and theoretical knowledge of Grounwater Monitoring.

From this Training students got the knowledge on importance of ground water, how its monitoring is done by GSDA and CGWB. Still the data density is required and those monitoring by volunteers on the Groundwater Monitoring Tool app provided by FES will help to increase those required data density of groundwater well monitoring. Students were enlightened about the importance of ground water monitoring and how it will affect the future coming crises of ground water.

### Scheduled for One Day Training as follows

Date	Time	place	Beneficiary
18 October 2022	03:40am -5:30pm	College Campus	77
10 000000 2022	03. 10 <b>u</b> m 2.30pm	conege campus	, ,

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Date: 7/10/2022

Place:Amravati Head

Department of Geology Shri Shivaji Science College,

Amravati

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### Shri Shivaji Science College, Amravati

### Department of Geology

### Student List

Sr. No	Name of Student	Class(Group)
1	Abhijit Dhande	B.Sc. III (PHG)
2	Abhijit Tayde	B.Sc. III (PHG)
3	Shloki Konde	B.Sc. III (CAP)
4	Shantanu Kondhekar	B.Sc. III (CAP)
5	Kajal Meshram	B.Sc. III (PHG)
6	Vedant Wankhade	B.Sc. III (PHG)
7	Apeksha Talan	B.Sc. III (PHG)
8	Samiksha Gowardipe	B.Sc. III (PHG)
9	Vivek Gaikwad	B.Sc. III (PHG)
10	Rohit Dhikar	B.Sc. III (PHG)
11	Shreyas Karale	B.Sc. III (CAP)
12	Harikesh Gawande	B.Sc. III (CAP)
13	Abhay Bhende	B.Sc. III (PHG)
14	Swami Deshmukh	B.Sc. III (PHG)
15	Vaibhav Morshe	B.Sc. III (CAP)
16	Arya Thakare	B.Sc. III (CAP)
17	Ajay Bhusum	B.Sc. III (PHG)
18	Roshan Wanjari	B.Sc. III (PHG)
19	Chaitanya Pole	B.Sc. II (CAP)
20	Mamta Sune	B.Sc. II (CAP)
21	Shraddha Rajgure	B.Sc. II (CAP)
22	Nikita Sonone	B.Sc. II (PHG)
23	Sayukta Ubhalkar	B.Sc. II (CAP)
24	Mahesh Uke	B.Sc. II (PHG)
25	Sarvesh Jade	B.Sc. II (PHG)
26	Rimzim Tayde	B.Sc. II (PHG)
27	Ansh Bhoware	B.Sc. II (CAP)
28	Kaivalya Hatwar	B.Sc. II (CAP)
29	Tanmay Talokar	B.Sc. II (CAP)
30	Darshan kadu	B.Sc. II (PHG)
31	Shravani Tingane	B.Sc. II (CAP)
32	Ankit Dahikar	B.Sc. II (PHG)
33	Kirti Ingole	B.Sc. I (CAP)
34	Aditya Aherwar	B.Sc. I (CAP)
35	Prathamesh Sawale	B.Sc. I (CAP)
36	Pranav Khangar	B.Sc. I (PHG)
37	Gauri giri	B.Sc. I (PHG)
38	Vedanti Sonporote	B.Sc. I (CAP)

39	Parth Gubre	B.Sc. I (CAP)
40	Payal Suroshe	B.Sc. I (CAP)
41	Anudh Kadu	B.Sc. I (PHG)
42	Ashutai Bhujbal	B.Sc. I (CAP)
43	Minakshi Wagare	B.Sc. I (PHG)
44	Ankit Dahikar	B.Sc. I (CAP)
45	Rohan Jawanjal	B.Sc. I (PHG)
46	Gayatri Shelke	B.Sc. I (CAP)
47	Mayur Thosare	B.Sc. I (PHG)
48	Sakshi Dharmale	B.Sc. I (CAP)
49	Shreya Avinashe	B.Sc. I (CAP)
50	Vaishnavi Khedkar	B.Sc. I (CAP)

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### **World Environment Day celebration:**

On the occasion of **World Environment Day 5**<sup>th</sup> **June 2022** the Department of Zoology, Shri. Shivaji Science College, Amravati organized a lecture of **Dr.G.A,Wagh** for COC Students on the theme-**Ecosystem Restoration**.

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### **Appeal for Eco-friendly Ganesh Festival:**

"Matiche Ganapati Basawa Nisargashi Bandhilki Dakhawa" this Clay Ganesh Idol Awareness Program was organized by Wildlife and Environment Conservation Society (WECS), Amravati in Collaboration of Department of Zoology, Shri Shivaji Science College, Amravati. 30<sup>th</sup> August 2022 as a part of MoU activity. Total 06 students from the department were participated in awareness Program as volunteers.



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### **World Ozone Day Celebration**

### **World Ozone day celebration:**

World Ozone Day is celebrated on September 16, every year. It is celebrated to spread awareness among people about the depletion of the Ozone Layer and search for possible solutions to preserve it. The Participants have to present posters. Participants have to submit Image of prepared posters was aimed to promote awareness regarding the global cooperation and protecting life on Earth. Theme: World Ozone Day-2022 is "Global Cooperation Protecting Life on Earth." The date of the event: 16 September 2022.

Dr R.G. Jadhao and Dr. G. A.Wagh were the convener and the co-convener of the program, respectively. Dr. G.D. Hande was the Organizing Secretary of the event. Dr A.S. Burghate, Chairperson of the program, gave an introduction about the theme of the Program and give Certificates to winners. Dr. G.D. Hande gave an introduction about the Chief Guest and Speaker Dr. Priyashri D. Deshmukh Field Officer, Maharashtra Pollution Control Board, Amravati and also proposed the vote of thanks.

For this event 51 Students participants attended and 43 Students were presented their Posters. Out of 43 students 3 students were selected. All participated students got certificate of participation.



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### Wildlife Week-2022 celebration:

To mark 'Wildlife Week-2022, Department of Zoology, Shri Shivaji Science College, Amravati has organized the following activities which were conducted with organising committee members- Dr. J. D. Dhote, Convener & Head, Dr. C. S. Ukesh, Chairperson & Head, Deptt. of Microbiology, Shri Shivaji Science College, Amravati, Dr. G. A. Wagh, Organizing secretary, Dr. A. R. Rajoria, Joint Organising secretary and Dr. S. J. Kawade, Dr. A. S. Tekade, Mr. V. L. Rane and Ms. B.S. Chaudhary as technical committee members

### Following Activities to be carried out in Wildlife Week:

- i) Knowing the threatened wildlife -Wildlife of the day- Day wise display of Threatened wildlife form Non-chordate to Chordate was done in order to spread awareness about depleting wildlife and develop interest in wildlife conservation. Starting Day-1 by Indian Pangolin; Day-2- Great Indian Bustard; Day- 3- Indian Gharial; Day-4- Malabar Tree Toad; Day- 5- Mahseer and Day-6- Blue Mormon. This activity conducted bu Dr. G.A. Wagh and Dr. A.a. Rajoria.
- ii) Hands on training of Laboratory instruments use in Wildlife research: To make students aware of basic instruments used in life sciences, a session was being taken to make students understand the use, working and maintenance of laboratory instruments.
- iii) PG Induction on Scope of Zoology in Wildlife Research- As a part of curriculum, PG induction programme of M. Sc. Students was taken to introduce students with the department, faculties, non-teaching staff, research scholars and respective PG Labs & research lab.
- iv) Workshop on "Role of Photography in Wildlife Research"- workshop was taken to emphasis on the importance of Photography in wildlife research. Teachers, students participated in this workshop. Technical session conducted by **Dr.G.A.Wagh.**



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### SHRI SHIVAJI SCIENCE COLLEGE, AMRAVATI





### WILDLIFE WEEK CELEBRATION- 2022

## THEME-"RECOVERING KEY SPECIES FOR ECOSYSTEM RESTORATION"

SUBTHEME- THREATNED WILDLIFE (WILDLIFE OF A DAY)

### **DAY- 1: INDIAN PANGOLIN**

### SCIENTIFIC CLASSIFICATION

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia

Scientific Name: Manis crassicaudata
Common Name: Indian Pangolin
Local Name: Khawalya Manjar



- > IUCN STATUS: ENDANGERED
- ➤ DISTRIBUTION: India , Bangladesh, Nepal, parts of Pakistan and Sri Lanka



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## Visit of P.G. Department of Zoology under MoU with Vidarbha Ayurved Mahavidyalaya

On the 22nd of February, 2023, with reference to the Memorandum of Understanding (MoU) between the Shri. Shivaji Science College, Amravati and Vidarbha Ayurvedic Mahavidyalaya, Amravati, a visit was organized for the students of M.Sc. I & M.Sc. II with faculty In-charge Miss. B.S. Chaudhari & Mr. V.L. Rane of Zoology Department to Vidarbha Ayurved Mahavidyalaya, Amravati. The purpose of the visit was to gain practical knowledge about Ayurveda and its practices. Upon arrival at 10.00 am, the students were welcomed by the faculty member Dr. Devendra Chaudhary sir of the college, who escorted them to the Ayurved Hospital. The students were given a brief overview on the Ayurveda. The students were then taken to the college divisions, where they had the opportunity to interact with the faculty members and learn about the research activities being conducted in the field of Ayurveda. The faculty members explained the various research projects being undertaken by the college and the significance of Ayurveda in the modern healthcare system. Later, the students visited the Ayurvedic Hospital, where they were introduced to the various Ayurvedic treatments available for various illnesses in Panchakarma Section. They also learned about the concept of Ayurveda, which emphasizes the use of natural remedies and holistic approach towards health and wellbeing. Students visited the Human anatomical section where Dr. A.S. Jain Sir explain the human anatomy. Students visit a human dissection section in which they observe a human dead body and different preserved human organs. We arranged interactive session with Hon. Principal Dr. Sanjay Chopkar sir, they explained the importance of Ayurveda.Dr. Sushil Yanpallewar sir explained about importance of Leech Therapy. M.Sc. II student Miss Vaishnavi Karale expressed her words. Mr. Vivek Rane guided to the students and last Dr. Devendra Chaudhari sir gives a vote of thanks. Overall, the visit was an enriching experience for the students, who gained valuable insights into the principles of Ayurveda and its applications in modern medicine. The visit provided the students with an opportunity to learn from experts in the field of Ayurveda and broaden their knowledge about traditional medicine systems. The visit was a great learning experience for the students of M.Sc. I & M.Sc. II of the Zoology Department. They were able to see the practical application of their theoretical knowledge and gain a deeper understanding of the Ayurvedic system of medicine.

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