

4th March 2020

**MEMORANDUM OF UNDERSTANDING
TO PROMOTE
ACADEMICS AND RESEARCH INTERACTION AND
COOPERATION**

Between



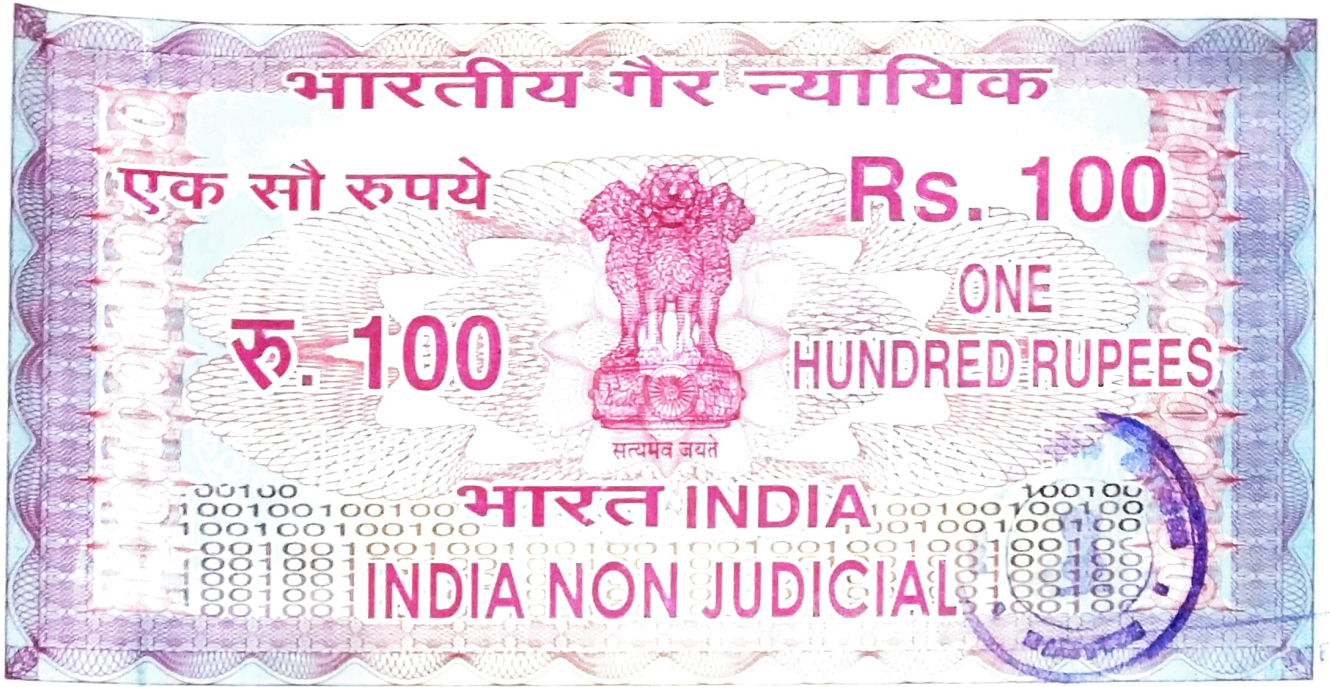
**KAMLA NEHRU MAHAVIDYALAYA
SAKKARDARA SQUARE, NAGPUR**

&



**SETH KESARIMAL PORWAL COLLEGE OF ARTS
AND SCIENCE AND COMMERCE, KAMPTEE**

DATED-04/03/2020



महाराष्ट्र MAHARASHTRA

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WA 921808

28/03/2020

**MEMORANDUM OF UNDERSTANDING
BETWEEN**

**Kamla Nehru college, Nagpur
AND**

Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee

To promote Academics, Research Interaction and Co-operation

This Memorandum of Understanding entered into on **04/03/2020** between
Kamla Nehru Mahavidyalaya, Sakkardara, Nagpur

&

Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee

1. Objectives

Kamla Nehru Mahavidyalaya, Sakkardara, Nagpur and Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee desiring to promote academic interaction and research co-operation between the two institute and will undertake joint research work in the areas of mutual interest.



मुद्रांक विक्री नोंदवही अनुक्रमांक १२३८६

दिनांक १०/३/२०२०

दस्तावा प्रकार २१११/५२

दस्त नोंदणी करणार आहे/नाही

मिळकतीचे थोडक्यात वर्ग

मुद्रांक विक्री घेणाऱ्याचे नाव

हस्ते असल्यास कोणते नाव द्यावे

दुसऱ्या पक्षकारचे नाव

मुद्रांक शुल्क (रुपये)

परवानाधारक मुद्रांक विक्रीसाठी आहे

व परवाना प्राप्त करून घेतले

मुद्रांक विक्रीसाठीचे ठिकाण द्या

डा. जे. ए. व्ही. विद्याजी बागडे रा. नागपूर
तर्फे. गिरीश अंगोवार ए. व्ही

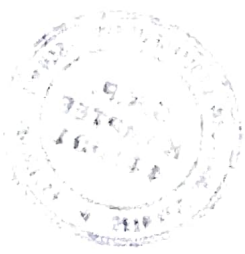
६५

सौ. प्रतिभा मधुकर भोसले

परवाना क्र. ०५/२०२०

कोड नं. ४६०२०१७

तहसील कार्यालय कामठी त कामठी जि. नागपूर



The concerned Teachers, PG Scholars, UG students, Ph.D.Scholars, Scientist and technical personnel of Kamla Nehru and Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee will formulate a) research projects for joint work with due approval of both the institutions, and b) training programmes for staff and students and technical personnel within the areas of co-operation will be undertaken at the two institutions.

Joint sponsored and consultancy projects with both long term and short term goals could be undertaken, keeping in view the interest and philosophies of the respective institutions.

2. Exchange /Deputation of Staff

Both Kamla Nehru and Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee jointly agree:

To exchange Teachers, PG Scholars, Ph.D.Scholars, Scientists/technical personnel on full-time/part-time basis for a limited period not exceeding one year at a time for the purpose of implementation of joint tasks within the areas of co-operation. The expenses towards research on honorarium, consumables, travel and contingencies shall be borne by each party on their own as specified in the joint research programme.

That the Teachers, PG Scholars, Ph.D.Scholars, Scientists/technical personnel will be encouraged to deliver lectures/invited talks at the other institution. The TA/DA and the honorarium for the lectures shall be borne by the host institution.

3. Joint Conference/Workshop/Courses/Dissertation

Both the institutions agree to hold/conduct, whenever feasible, joint Workshops, Conferences, Training Courses within the areas of co-operation.

4. Sharing of Facilities

The two institute agree to share their respective important R & D facilities in order to promote academic and research in the areas of cooperation to intensify the high priority area programme of Science and Technology

Access to laboratory, library and other supporting facilities for the staff involved in the joint research programme at a Kamla Nehru and Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee will be provided by both institutes.

5. Areas of Co-operation

The areas of co-operation will be defined and modified from time to time by the co-ordination committee set up for the purpose. The areas identified for cooperation are:

- Kamla Nehru College will provide training on the basic technology .Level 1-2 to under graduate students of collaborative institute and level 3-4 to post graduate students on nominal / fixed charges.
- Kamla Nehru College will provide certificate courses /Advanced Life science technology & skill development courses for 3 months and 6 months,
- Kamla Nehru and SKPC, Kamptee will take routine lecture on advance techniques and advance & recent science topics once or twice in a year with a collaborating Institute without any fees.

- Kamla Nehru will arrange 1 experiment in addition to lecture in Institute for demonstration of various diagnostic tools, kits and instruments for the knowledge of candidate & under and post graduate students.
- Techniques or practical part included in syllabus will be included in the training on nominal charges.
- Kamla Nehru College will arrange one free lab visit for the collaborative Institute once in a year for selected students for the exposure.
- Both the Institute can organize local conference for advanced topics for the scientist, teachers and students on mutual agreement.
- Wherever necessary both Institutes will provide their advanced faculty to researcher working in collaborating Institute for their research work as per the quotation/Nominal charges approved by both the institute.

6. Co-ordination Committee

The following will constitute the Coordination committee to monitor and review the collaborative programme between the two institutes:

- a) Principal, Kamla Nehru and /or his nominee(s)
- b) Principal, S.K. Porwal College and/or his nominee(s)
- c) Coordinator, S.K. Porwal College
- d) Coordinator, Kamla Nehru
- e) HOD of the concerned department(s) from both of the institutions to be invited whenever needed

The Co-ordination Committee shall;

- Review the progress of the identified programmes at least once a year.
- Consider the new R & D proposals for joint collaboration and implementation on case to case basis including intellectual Property Right (IPR) and financial arrangements.
- Consider the addition/deletion of areas of co-operation between the two institutions during review.
- Consider the continuance of the MoU.
- If want to terminate the MoU both the parties have to give notice 1 month prior.

7. Publications

All publications in the programmes of co-operation will be co-authored by the concerned staff/Research Fellow and technical personnel of Kamla Nehru and SKPC.

8. Non-Disclosure

In case of joint research and consultancy projects taken up by Kamla Nehru and SKPC, no party shall disclose any information to media/any unauthorized person from each institute in any form whether electronic/print without mutual consent and approval by Coordination Committee.

9. Validity Period

This MOU shall remain valid for a period of five years from the date of signing unless renewed. At the end of validity period of the MOU, a fresh MOU with similar/modified terms may be considered for signing.

In witness where of the two parties have signed this memorandum of understanding by both the parties on date 04, month 03 and year 2020 .

Authorised Signatory on behalf of Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee 441001 Dist-Nagpur

1st Partner name : Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee 441001 Dist-Nagpur

Partner representative : Dr. Mahendra B. Bagade

Position : Principal

Address : Seth Kesarimal Porwal College of Arts and Science and Commerce, Kamptee 441001 Dist-Nagpur

Telephone : +91-7109288346

e-mail : principal@skpckamptee.org

Website : www.skpckamptee.org


Principal
S.K.P. College, Kamptee



Authorised Signatory on behalf of Kamla Nehru Mahavidyalaya, Sakkardara chowk, Nagpur

2nd Partner name : Kamla Nehru College, Sakkardara Nagpur

Partner representative : Dr. Dilip S. Badwaik

Position : Principal

Address : Kamla Nehru College, Sakkardara, Nagpur

Telephone : (0712)2747853, 2749784

e-mail : kncnag@rediffmail.com

Website : www.kamlanehrucollege.ac.in


Principal
Kamla Nehru Mahavidyalaya
Sakkardara Chowk, Nagpur



In presence of,

1. Dr. Jayshree Thaware 

2. Dr. Rashmi Jachak 

3. Dr. Sandhya Moghe 

SETH KESARIMAL PORWAL COLLEGE OF ARTS AND SCIENCE AND COMMERCE, KAMPTEE

DEPARTMENT OF BOTANY

REPORT

Popular Science lecture (webinar) in Kamala Nehru Mahavidyalaya, Nagpur under MoU activity by Dr Shalini Chahande

The memorandum of Understanding was come into existence with Kamla Nehru Mahavidyalaya, Nagpur on 04/03/2020. The MoU was done to promote academics and research interaction and cooperation.

One day popular science lecture(webinar)on ‘Vaccine development: The current Pandemic Scenario’ was organized under MoU activity in association with Indian Women Scientist Association, Nagpur Branch supported by BRNS-DAE with Kamala Nehru College, Nagpur on 5th March 2021 through online mode on Zoom App. The guest lecture objective was to introduce the students the advancement in vaccine development in recent times. A total 250 students participated in this webinar. The key guest speaker of this event was Dr Shalini Chahande Assistant Professor in Biochemistry, S.K.Porwal College, Kamptee. She has given presentation on respective topic. She has highlighted the need of present scenario and details of vaccine development with its applications and advantages. She emphasized about important techniques in Biotechnology for the development of vaccine and different process involvement in commercialization of it and many more. The session was interactive and informative and students get to know in detail about the technique. The comparing of the event was carried out by Dr Neha Takur Assistant Professor Environment Science Department. The vote of thanks was proposed by Dr Shardul Wagh.

The outcomes of the webinar,

- The students carried information about the benefit of vaccine development and its advantage in preventing dreadful disease.
- The scientific mechanism beneath vaccine development was very well understood.
- All students get benefitted from this webinar and gave positive response through feedback form.

Dr. Jayshree Thaware
Head, Department of Botany



**Seth Kesarimal Porwal College
of Arts and Science and
Commerce, Kamptee 441001**



**INVITATION FOR
GUEST LECTURE ON
'PLANT TISSUE
CULTURE'**

*organizes by
Department of Botany*

**Come join the event virtually
April 24th 2021 , 11.00am**

RESOURCE PERSON

DR. SANDHYA MOGHE

*ASSISTANT PROFESSOR AND HEAD,
DEPARTMENT OF BIOTECHNOLOGY, KAMLA
NEHRU MAHAVIDYALAYA, NAGPUR*

DR. JAYSHREE THAWARE

CONVENER

DR. PASHMI JACHAK

ORGANIZING SECRETARY

Report on activity under MOU taken

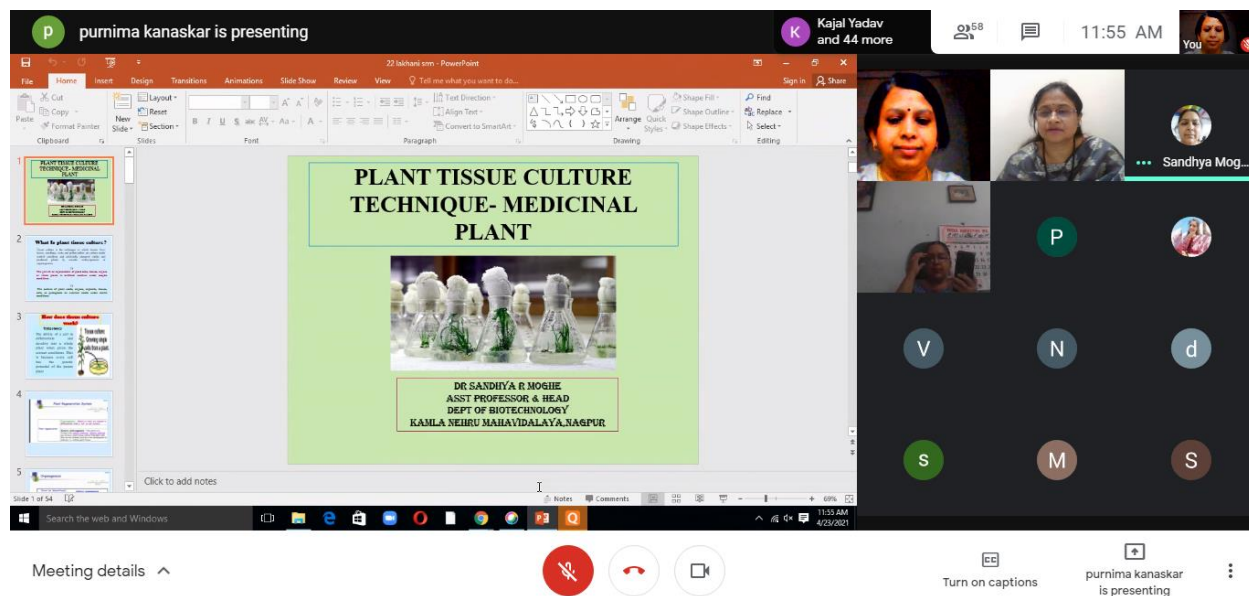
The memorandum of Understanding was come into existence with Kamla Nehru Mahavidyalaya, Sakkardara Nagpur on 04/03/2020. The MoU was done to promote academics and research Interaction and cooperation.

Online Guest lecture by Dr Sandhya Moghe on 'Plant Tissue Culture'

The guest lecture was arranged for Semester VI students of our college of academic session 2020-2021 on 24/04/2021. The resource person for the guest lecture was Dr Sandhya Moghe, Assistant Professor of Biotechnology, Kamla Nehru Mahavidyalaya, Nagpur in online mode on 'Tissue Culture'.

Dr. Moghe madam thoroughly explained and covered the topics like, What is Plant Tissue Culture, Why it is termed as Micropropagation, The Laboratory set up and Optimum Condition required for tissue culture, Equipments, Instruments required for Tissue culture, Different methods of Sterilizations, Culture media Preparations, Preparation of Slants of media, Methods of Surface sterilization of explants, Advantages and disadvantages of micropropagations. A fruitful and Healthy discussion on Genetically Modified crops was carried out. Advantages and disadvantages of transgenic plants were also discussed.

Total 68 students attended the lecture on 'Plant Tissue Culture' on Google Meet. Dr Rashmi Jachak conducted the program and Dr Jayshree Thaware gave vote of thanks.



The screenshot displays a Google Meet interface during an online lecture. The main window shows a PowerPoint presentation titled "PLANT TISSUE CULTURE TECHNIQUE- MEDICINAL PLANT". The slide features a photograph of laboratory glassware containing plant tissue cultures. Below the image, the presenter's name and title are listed: "DR. SANDHYA R. MOGHE, ASST PROFESSOR & HEAD, DEPT OF BIOTECHNOLOGY, KAMLA NEHRU MAHAVIDYALAYA, NAGPUR". The presentation is being shared by "purnima kanaskar is presenting". The meeting controls at the bottom include a red mute button, a red hang-up button, a camera icon, and a "Turn on captions" option. The meeting details section shows "purnima kanaskar is presenting" and a list of participants represented by initials: V, N, d, s, M, S. The time is 11:55 AM on 4/23/2021.

purnima kanaskar is presenting

P Pallavi Dhole and 49 more

11:36 AM

Essential elements for plant growth

Element	Function
Nitrogen (N)	Component of proteins, nucleic acids and some coenzymes Element required in greatest amount
Potassium (K)	Regulates osmotic potential, principal inorganic cation
Calcium (Ca)	Cell wall synthesis, membrane function, cell signalling
Magnesium (Mg)	Enzyme cofactor, component of chlorophyll
Phosphorus (P)	Component of nucleic acids, energy transfer, component of intermediates in respiration and photosynthesis
Sulphur (S)	Component of some amino acids (methionine, cysteine) and some cofactors
Chlorine (Cl)	Required for photosynthesis
Iron (Fe)	Electron transfer as a component of cytochromes
Manganese (Mn)	Enzyme cofactor
Cobalt (Co)	Component of some vitamins
Copper (Cu)	Enzyme cofactor, electron-transfer reactions
Zinc (Zn)	Enzyme cofactor, chlorophyll biosynthesis
Molybdenum (Mo)	Enzyme cofactor, component of nitrate reductase

Meeting details


Turn on captions

purnima kanaskar is presenting

purnima kanaskar is presenting

A Ankita Lonkar and 43 more

11:50 AM



MULTIPLE SHOOT INDUCTION in BACCOPA plant

Meeting details

Turn on captions

purnima kanaskar is presenting

purnima kanaskar is presenting

Skp Aaliyanaush... and 46 more

11:41 AM

SURFACE STERILIZATION OF SEEDS

- Select good quality seeds
- ↓
- Seeds wash with tap water
- ↓
- Seeds wash with liquid detergent for 10 min
- ↓
- Seeds treated with 2% bavistine for 60 min
- ↓
- Seeds treated with 0.1% HgCl₂
- ↓
- Soaked in autoclaved petridish with tissue paper

Meeting details ^



Turn on captions

purnima kanaskar is presenting

purnima kanaskar is presenting

Culture Medium

<p>Macroelements</p> <ul style="list-style-type: none"> Potassium (K) 20 -30 mM Phosphorous (P) 1-3 mM Calcium (Ca) 1-3 mM Magnesium (Mg) 1-3 mM Sulfur (S) 1-3 mM 	<p>Microelements</p> <ul style="list-style-type: none"> Iron (Fe) 1 m M Manganese (Mn) 5-30 m M Zinc (Zn) Boron (B) Copper (Cu) 0.1 m M Molybdenum (Mo) 1 m M Cobalt (Co) 0.1 m M 	<p>Plant growth regulators</p>
<p>Vitamins</p> <ul style="list-style-type: none"> Thiamine (vitamin B1) Nicotinic acid (nicotin) Pyridoxine (B6) Myo-inositol 	<p>Sugar</p> <ul style="list-style-type: none"> Sucrose Others 20 to 40 g/l 	<p>Support system</p> <ul style="list-style-type: none"> Agar Agarose Gelatin (Phytigel)

Meeting details ^



Meeting details

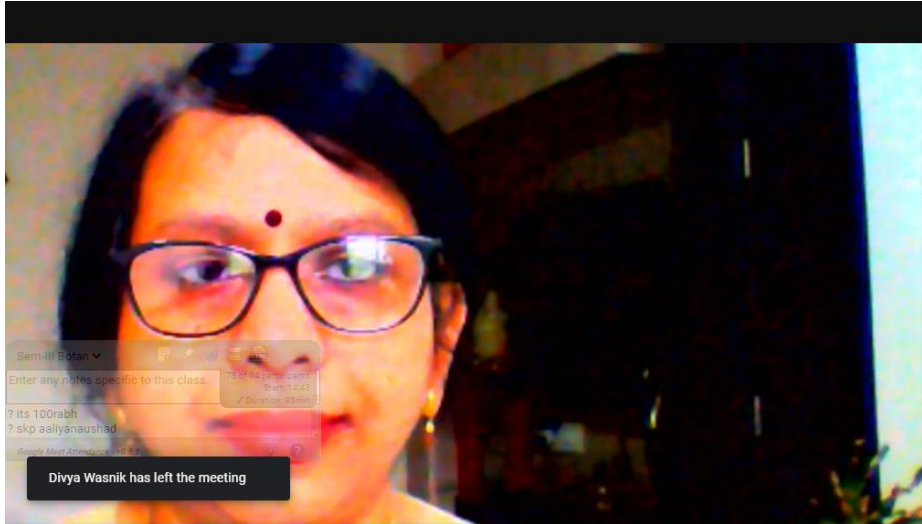
People (60)

Chat

- P Puja Meshram
- P Puja Talmale
- purnima kanaskar
- purnima kanaskar Presentation
- P Purva Raut
- R Radhika rao
- R Raj Ingale
- R Ruchita Thawkar

Turn on captions

purnima kanaskar is presenting



Meeting details ✕

People (53) Chat (3)



Add people

- Jayshree Thaware (You)
- Aachal Sonkar
- Aditya Thaware
- Afiya Sayyad
- Akansha Patil
- akash shendragade
- Akshu Mankar
- Altaf Jabeen

Meeting details



Turn on captions

Present now



Biotechnology Lab visit under MOU taken by Department of Botany

The memorandum of Understanding was come into existence with Kamla Nehru Mahavidyalaya, Nagpur on 04/03/2020. The MoU was done to promote academics and research interaction and cooperation.

The guest lecture was arranged for Semester VI students of our college of academic session 2021-2022 on Thursday, 10/03/2022. The resource person for the lecture was Dr Sandhya Moghe, Assistant Professor and head Department of Biotechnology, Kamla Nehru Mahavidyalaya, Nagpur on 'Tissue Culture'.

Dr. Moghe madam thoroughly explained and covered the topics like, What is Plant Tissue Culture, Why it is termed as Micropropagation, The Laboratory set up and Optimum Condition required for tissue culture, Equipments, Instruments required for Tissue culture, Different methods of Sterilizations, Culture media Preparations, Preparation of Slants of media, Methods of Surface sterilization of explants, Advantages and disadvantages of micropropagations. A fruitful and Healthy discussion on Genetically Modified crops was carried out. Advantages and disadvantages of transgenic plants were also discussed.

Total 18 students visited the lab and got hand on training on basic aspects of tissue culture. Saurabh Rahangdale gave vote of thanks.

To,

The Principal

S.K.Porwal College,

Kamptee

Sub:-Permission to visit B.Sc. VIth Semester Botany Students to Biotechnology Lab of Kamala Nehru College, Nagpur on 05/03/2022.

Sir,

I the undersigned, wants your permission to visit Biotechnology and tissue culture lab with Semester VI Students at Kamla Nehru Mahavidyalaya, Nagpur on ~~Saturday, 05/03/2022~~ at 11.00 am, under the MoU activity we made with Kamla Nehru Vidyalaya. *Thursday 10/03/2022*

Dr. Rashmi Jachak ^{will} accompanying me.

Please, grant the permission for lab visit.

Thanking You,

Date: 02/03/2022

J. Thaware
2/03/2022

Yours Sincerely,

(Dr Jayshree Thaware)

Assistant Professor and Head

Department of Botany

Permitted
to visit
2/3/22

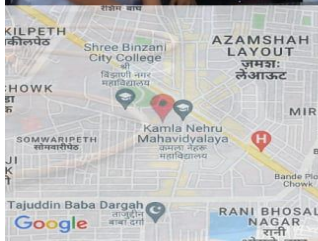
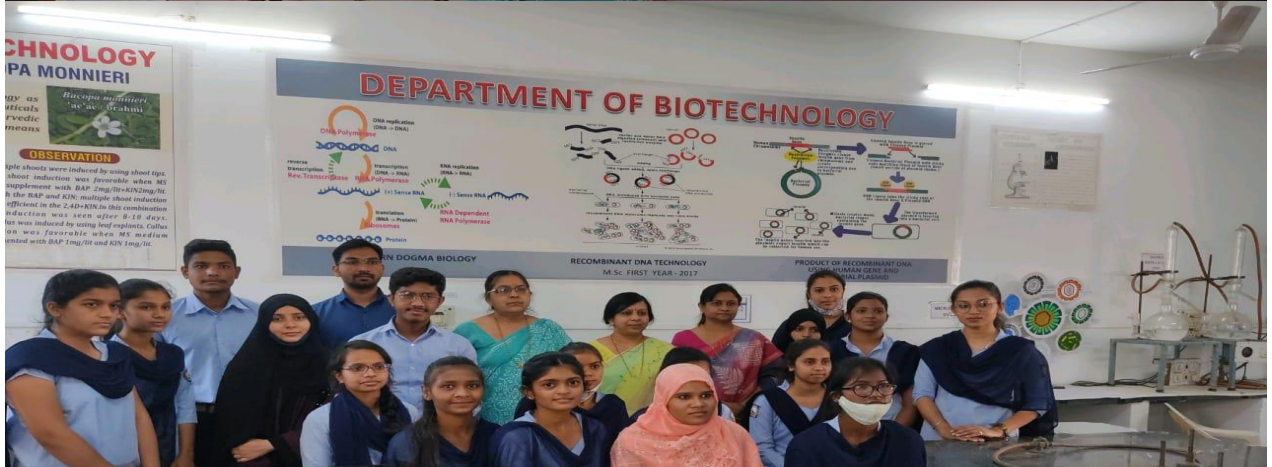
UNDERTAKING FROM STUDENTS

We the following students of B.Sc.III, Semester VI student sign this undertaking regarding following conditions for Biotechnology Lab Visit at Kamala Nehru College, Sakkardara, Nagpur on ~~Saturday, 5th 10th~~ ^{Thursday} March 2022.

We are signing the undertaking,

1. We will directly reach at Kamala Nehru College, Sakkardara.
2. About the discipline during the lab visit.
3. Protection of our belongings.
4. Any un-foreseen Natural Accidents or Calamities during the visit or travel.
5. Obey the instructions given by teachers.

Sr. No	Name of Students	Signature of Student	Mobile No. of Student	Phone no. of parents
1	Nagma Noor Ansari	<i>Nagma</i>	7769890394	8459367068
2	Mariyam Khatoun	<i>Mariyam</i>	8698166679	8698379097
3	Prerna M. Lanjewar	<i>Prerna</i>	9307710187	8806327983
4	Karina S. Marghade	<i>Karina</i>	9022153386	9834008980
5	Namra Arshad	<i>Namra</i>	9309532809	8788425704
6	Afreena S. Patil	<i>Afreena</i>	8329871309	8329874309
7	Poochi H. Mankar	<i>Poochi</i>	9309965986	8262889242
8	Sakshi B. Rangari	<i>Sakshi</i>	8421980268	9421210468
9	Deednya J. Shankarpuree	<i>Deednya</i>	8766445952	901153365
10	Sonu S. Dorsetwar	<i>Sonu</i>	8262885748	7666177422
11	Ritika V. Shende	<i>Ritika</i>	8956412142	9579018243
* 12	Aarohi Tiwari	<i>Aarohi</i>	9856807325	9545651355
* 13	Raashi Athankar	<i>Raashi</i>	9022758553	7775069761
14	Saurabh Rahangdale	<i>Saurabh</i>	8080921183	7066861291
15	Kaunain haideti	<i>Kaunain</i>	9359786528	9309593328
16	Vaishnavi Tamshetwar	<i>Vaishnavi</i>	8805131989	9284177599
17	Taniya Nilamwar	<i>Taniya</i>	7745872356	8605993798
* 18	Kajal Wanjari	<i>Kajal</i>	9022303077	9359258527
* 19	Anjali Kashyap	<i>Anjali</i>	7499628038	7447281532



Kamla Nehru Mahavidyalaya, Raghujai Nagar, Nagpur, Maharashtra 440009, India

Nagpur
Maharashtra
India

2022-03-10(Thu) 02:04(pm)

34°C
93°F



Kamla Nehru Mahavidyalaya, Raghujji Nagar, Nagpur, Maharashtra 440009, India

Nagpur
Maharashtra
India



30°C

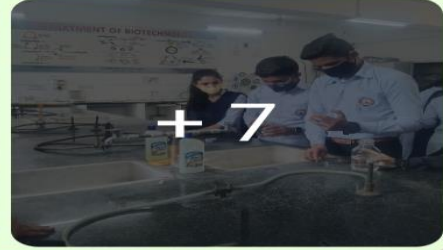
86°F

2022-03-10(Thu) 10:45(am)



Final year Botany 21-22

Abbas, Anamika, Jachak, Mohan...



Jachak Mam

➔ Forwarded



Kamptee, Nagpur : कामठी:
कामठी:पोरवालमहाविद्यालयाचे वि...
Kamptee, Nagpur : कामठी: कामठी:...
public.app

कामठी:पोरवालमहाविद्यालयाचे विद्यार्थ्यांचे
नागपुर येथील नेहरूमहाविद्यालयातील
वनस्पतीविभाग व जैवतंत्रज्ञान प्रयोगशाळेत भेट
<https://public.app/s/Pgfh4>

10:07 PM

about today's visit 🙌

10:08 PM

Message



Dr. J. S. Thaware
Head, Department of Botany