



**Rashtrasant Tukadoji Maharaj Nagpur University**

# **ONE DAY WORKSHOP ON MOLECULAR BIOLOGY TECHNIQUES**

**PGTD of Molecular Biology and Genetic Engineering  
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur  
is going to be conducted a  
"One Day Workshop on Molecular Biology techniques"  
for UG and PG students of Life Sciences under the  
"College Connect Program"  
in collaboration with  
Department of Botany, Shri Shivaji Science College, Nagpur**



## **Techniques to be covered**

- Isolation and Quantification of nucleic acids
- Polymerase Chain Reaction (PCR)
- SDS-PAGE
- Agarose Gel Electrophoresis
- ELISA
- Demonstration of Instruments and Equipments used in Molecular Biology Laboratory

## **Free Registration for Workshop**



**29 November, 2025  
10:00 AM - 5:30 PM**



**PGTD Of Molecular  
Biology and Genetic  
Engineering, University  
Campus, Nagpur**

To,  
The Principal  
Shri Shivaji Science College  
Congress Nagar, Nagpur

Date: 28/11/2025

Subject: Permission for Students to Attend One-Day Workshop on Molecular Biology Techniques.

Respected Sir,

I request you to kindly grant permission to the students of the Department of Botany to attend the One Day Workshop on Molecular Biology Techniques organized by the PGTD of Molecular Biology and Genetic Engineering, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, under the College Connect Program in collaboration with Department of Botany, Shivaji Science College, Congress Nagar, Nagpur. The workshop will be held on 29/11/2025 from 10.00 am to 5.30 pm.

I request you to kindly allow the students to participate in this workshop.

Thanking you.

Yours faithfully,

R. H. Mahakhode

Dr. R. H. Mahakhode  
Head

Department of Botany  
**Associate Professor and Head**  
Department of Botany  
S.S.E.S. Amt's Science College  
Congress Nagar, Nagpur-12.

Permission granted  
ASR  
28/11/2025

**Department of Molecular Biology and Genetic Engineering  
Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur**

Dr. D.P. Gogle,  
HOD, MBGE,  
RTMNU, Nagpur



E-mail ID: rtmnumbge@gmail.com  
Contact: 8830319586

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Date: 25/11/2025

**NOTICE**

**PGTD of Molecular Biology and Genetic Engineering**

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

is going to be conducted a

**“One Day Workshop on Molecular Biology techniques”**

for UG and PG students of Life Sciences under the

**“College Connect Program”**

in collaboration with

**Department of Botany, Shri Shivaji Science College, Nagpur**

**Date: 29/11/2025**

**Time: 10.00 am-5.30 pm**

**Dr. D. P. Gogle**  
Head

Dept. of Molecular Biology  
& Genetic Engineering  
Rashtrasant Tukadoji Maharaj  
Nagpur University, Nagpur

**Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur**

**DEPARTMENT OF BOTANY**

**Session – 2025-2026**

**Report on**

**One-Day Workshop On “Molecular Biology Technique”**

One-day workshop on “Molecular Biology Techniques” was conducted by Department of Molecular Biology and Genetic Engineering PGTD, Rashtrasant Tukadoji Maharaj Nagpur University under College Connect Program in collaboration with Department of Botany, Shivaji Science College Congress Nagar, Nagpur, held on 29<sup>th</sup> November 2025. A total of 28 students actively participated in the workshop. The workshop aimed to educate participants on the scientific methods such as Isolation and Quantification of nucleic acid, Polymerase Chain Reaction (PCR), SDS-PAGE, Agarose Gel Electrophoresis, ELISA. Students acquired knowledge about some important Instruments and Equipment used in Molecular Biology Laboratory.

**Objectives-**

- To provide hands-on training in above mentioned Molecular Techniques.
- To demonstrate the proper methods used in Molecular Technique.
- To know about safety protocol in Molecular Biology Laboratory.

The workshop was inaugurated by Hon'ble Prof. D. P. Gogle, Head, Department of MBGE, RTMNU, Nagpur. The Chief Guest for the occasion was Dr. R. H. Mahakhode, Head, Department of Botany, Shivaji Science College, Nagpur, and the workshop was convened by Dr. Madhuri Thakare, Assistant Professor, Department of MBGE, RTMNU, Nagpur. The workshop commenced with an introduction to laboratory safety standards, followed by demonstrations and hands-on training on the handling of various instruments used in molecular techniques. Students gained practical exposure to the isolation and purification of DNA and RNA, Polymerase Chain Reaction (PCR), Gel Electrophoresis, and ELISA techniques. Interactive sessions with faculty members and research scholars of the Department of MBGE, RTMNU further enriched the learning experience. The workshop provided students with valuable insights and practical skills applicable to diverse fields such as Botany, Molecular Biology, Biotechnology and Genetic Engineering. The program was successfully coordinated by Dr. Madhuri Thakare, with support from the departmental staff of MBGE, RTMNU, Nagpur. The coordination was carried out by Dr. R. H. Mahakhode, along with Dr. A. M.

Katgaye, Dr. S. S. Deshmukh, Dr. Tinku Kumar Rajput, Ms. Utkarsha Pete, Mr. Swapnil Fuse and Ms. Chaitali Patil Department of Botany, Shivaji Science College, Nagpur. The Molecular Biology Techniques workshop proved to be highly informative and offered valuable hands-on experience to all participants.

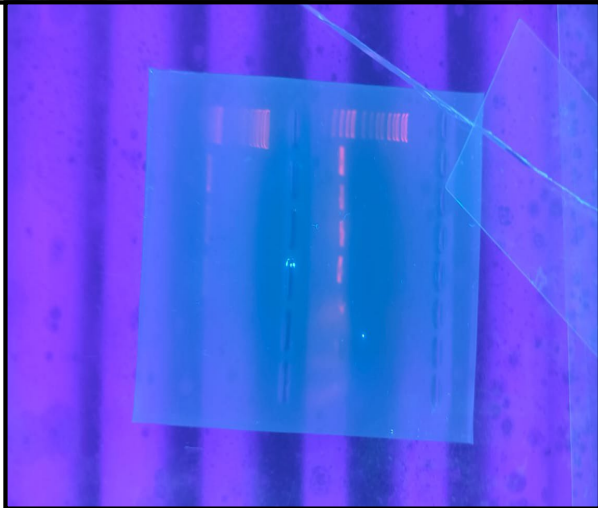


Inauguration of Workshop at the hands of Dr. Rupali H. Mahakhode, Head, Department of Botany, Shivaji Science College, Nagpur





Hands On Training session On PCR, SDS- PAGE, Gel Electrophoresis, ELISA Techniques



Separation of DNA fragments observed under UV light after gel electrophoresis



Valedictory Function Chaired by Dr. D. B. gogle, Head, Department of MBGE, PGTD, Nagpur

**List of Students to Attend One-Day Workshop on Molecular Biology Techniques organized by the PGTD of Molecular Biology and Genetic Engineering, R. T. M. Nagpur University, Nagpur.**

S. No	Name of Students	Class	Signature
1.	Purna Dinesh Paliwal	MSc 2 <sup>nd</sup> year	
2.	Sneha Rajendra Somkuwar	— 11 —	
3.	Kamini Gajanan funne	— 11 —	
4.	Falguni Sanket Shivhare	— 11 —	
5.	Rasika Chandrashekhar Patil	M.sc 2 <sup>nd</sup> year	
6.	Payal Shivramji Dharpure	11	
7.	Kalyani Chudaman Shahare	MSc 2 <sup>nd</sup> year.	
8.	Janhavi Hemant Kayarkar	M.sc II year	
9.	Kajal Chandrashekhar Meshram	M.sc II year	
10.	Pooja Sohan Rodekar	M.sc II year	
11.	Anushka Anand Khare		
12.	Prachi Shailesh Kanoje	MSc I <sup>st</sup> year	
13.	Sneha Mahendra Ramteke	MSc I <sup>st</sup> year	
14.	Payal Ganpat Maraskolhe	MSc I year	
15.	Khushi Rupchand Deshmukh	— 11 —	
16.	Prabodhini Pradip Moon	— 11 —	
17.	Madhvi Gurnule	BSC 3 <sup>rd</sup> CBM	
18.	Tanvi Mandale	BSC 3 <sup>rd</sup> (CB2)	
19.	Shreya Wankhede	BSC 3 <sup>rd</sup> (CB2)	
20.	Madhura Rajput	BSC (3 <sup>rd</sup> CB2)	
21.	Dipesh Yadav	BSC 3 <sup>rd</sup> (CB2)	



## **ACTION TAKEN REPORT**

The workshop focused on laboratory safety standards and practical training in essential molecular biology techniques such as DNA and RNA isolation, PCR, Gel Electrophoresis, and ELISA. Interactive sessions with faculty members and research scholars enhanced the learning experience. A total of 28 students actively participated in the workshop, gaining valuable hands-on experience and practical skills applicable in Botany, Molecular Biology, Biotechnology, and Genetic Engineering. Overall, the workshop successfully enriched students' technical knowledge and research orientation.

## **FEEDBACK**

To assess the success of the event and gather insights for improvement, feedback was collected through a questionnaire. Below are the key questions:

### ***Feedback Questionnaire***

**1. How relevant were the topics covered to your syllabus/research?**

- a) Highly relevant      b) Relevant      c) Slightly relevant      d) Not relevant

**2. How effective were the resource persons in explaining the concepts?**

- a) Excellent      b) Good      c) Average      d) Poor

**3. The hands-on training sessions helped you understand the techniques:**

- a) Very effectively      b) Effectively      c) Slightly      d) Not at all

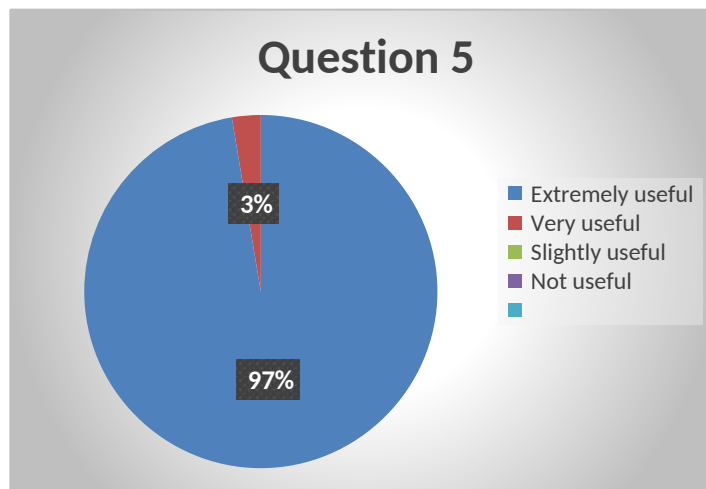
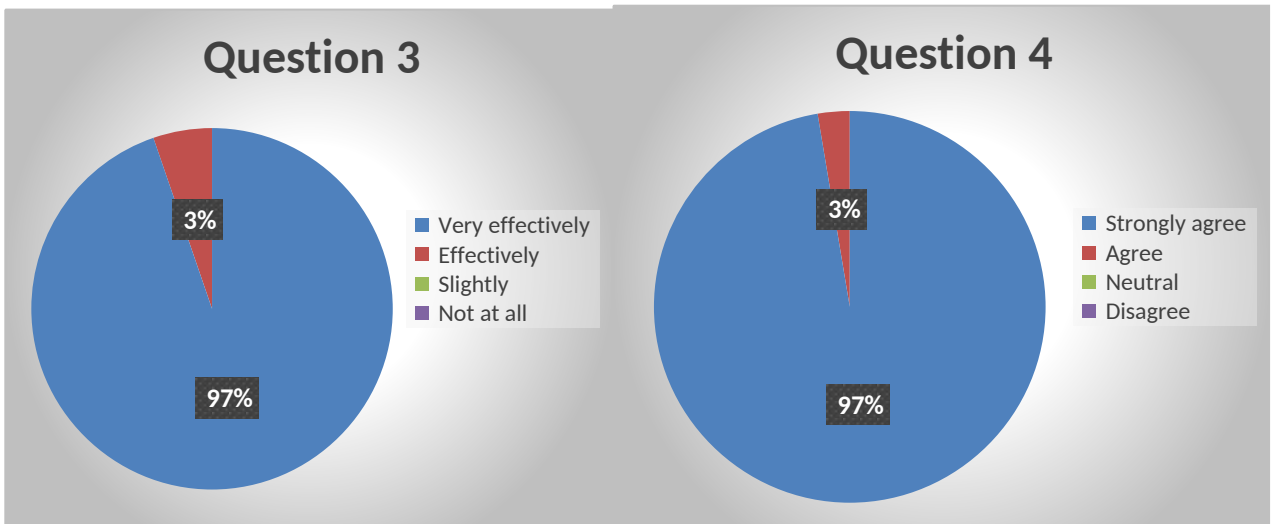
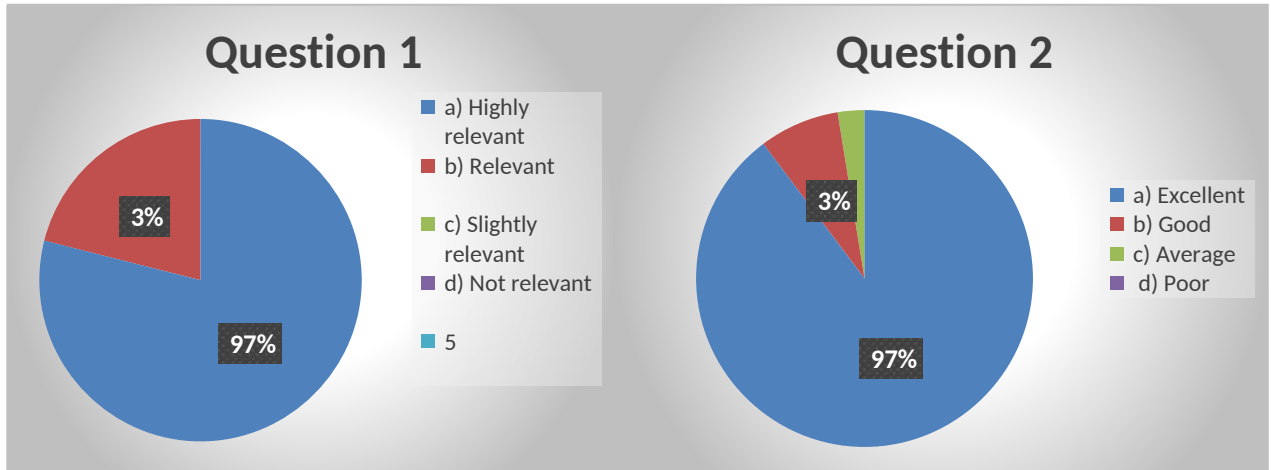
**4. The workshop improved your practical skills in molecular biology:**

- a) Strongly agree      b) Agree      c) Neutral      d) Disagree

**5. How useful will this workshop be for your future studies/career?**

- a) Extremely useful      b) Very useful      c) Slightly useful      d) Not useful

## Students Feedback





Rashtrasant Tukadoji Maharaj Nagpur University  
 Department of Molecular Biology and Genetic Engineering  
 in collaboration with  
 Shivaji Science College, Congress Nagar, Nagpur



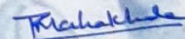
Organizing  
 One Day Workshop on  
 'Molecular Biology Techniques'

# Certificate

This is to certify that, Ms./Mr. PAYAL S. DHARPURE  
 From SHIVAJI SCIENCE COLLEGE has attended one day  
 workshop on 'Molecular Biology Techniques' held at Department of Molecular Biology and  
 Genetic Engineering, RTMNU, Campus, Nagpur, on 29<sup>th</sup> Nov. 2025

  
 Head

Molecular Biology and Genetic Engineering,  
 RTMNU

  
 Head

Shivaji Science College, Nagpur



Signature of IQAC Co-ordinator  
 IQAC Coordinator  
 S.S.E.S.A's  
 Science College, Nagpur





Dr. R. H. Mahakhode  
 Associate Professor and Head  
 Department of Botany  
 S.S.E.S. Am's Science College  
 Congress Nagar, Nagpur-12.



Signature of Principal  
 Principal  
 S.S.E.S. Amravati's  
 Science College, Nagpur.