



**Progressive Education Society's  
Modern College of Arts, Science and Commerce,  
Ganeshkhind, Pune-16**

# CERTIFICATE

*This is to certify that Mr./Miss: **Pranali Swaminath Jadhav.***

of Class **TYBA History (Spl-3) Applied History**, Seat No. **221032176**

has submitted the project titled: **Alutedar**

as prescribed by the

*Savitribai Phule Pune University for the academic year 2022- 2023.*

**Teacher in- Charge**

***Dr.gunjan garud***

*Head of Department*

*Signature of the Examiner*





Savitribai Phule Pune University

सावित्रीबाई फुले पुणे विद्यापीठ



Progressive Education Society's  
Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16

## CERTIFICATE

*This is to certify that Mr./Miss - Murumkar Avinash Dnyaneshwar  
of Class TYBA History (Spl-3) Applied History,*

*Seat No.221032162*

*Has submitted the project titled - Importance of Modi Script in  
History*

*as prescribed by the*

*Savitribai Phule Pune University for the academic year 2022- 2023.*

Teacher in- Charge

Head of Department

Signature of the Examiner





Savitribai Phule Pune University  
विद्यया ऽमृतमश्नुते



Progressive Education Society's  
**Modern College of Arts, Science and Commerce,**  
Ganeshkhind, Pune-16

## **CERTIFICATE**

*This is to certify that Mr. Arjun Dattatray Wakode of Class TYBA History (Spl-3) Applied History, Seat No. 221032168 has submitted the project titled **MARDANI KHEL IN PERIOD OF MARATHAS***

*as prescribed by the*

*Savitribai Phule Pune University for the academic year 2022- 2023.*

*(Signature)*  
2/5/23

*Teacher in- Charge*

*(Signature)*

*Head of Department*

*(Signature)*

*Signature of the Examiner*





Savitribai Phule Pune University  
विद्यया ऽमृतमश्नुते




Progressive Education Society's  
**Modern College of Arts, Science and Commerce, Ganeshkhind,**  
Pune-16

## CERTIFICATE

This is to certify that Mr./Miss Sadhyanani Shivaji Gaikwad  
of Class **TYBA History (Spl-3) Applied History**, Seat No. 221032172  
has submitted the project titled कोरोना काळात घरकाम करणाऱ्या  
महिलांची परिस्थिती  
(Life of housemaid woman's during covid-19)

as prescribed by the

Savitribai Phule Pune University for the academic year 2022- 2023.

  
Teacher in- Charge

  
Head of Department

  
Signature of the Examiner

  
Principal  
Modern College of Arts, Science  
& Commerce, Ganeshkhind, Pune-16





Savitribai Phule Pune University  
Established in 1973



Progressive Education Society's  
**Modern College of Arts, Science and Commerce,**  
Ganeshkhind, Pune-16

## CERTIFICATE

*This is to certify that Mr./Miss **Kavita Uttamrav Nikam**  
of Class **TYBA History (Spl-3) Applied History**, Seat No. 221032171*

*has submitted the project titled\_ **marriage rites***

*as prescribed by the*

*Savitribai Phule Pune University for the academic year 2022- 2023.*

Head of Department

Teacher in- Charge

Dr. Gunjan Garud

• Signature of the Examiner





Savitribai Phule Pune University



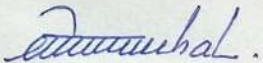
Progressive Education Society's  
**Modern College of Arts, Science and Commerce, Ganeshkhind,**  
Pune-16

## **CERTIFICATE**

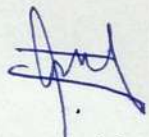
This is to certify that Mr./Miss Sangeeta . C. Dhumal  
of Class **TYBA History (Spl-3) Applied History**, Seat No. 221033309  
has submitted the project titled Folk Dance

as prescribed by the

*Savitribai Phule Pune University for the academic year 2022- 2023.*

  
Teacher in- Charge

  
Head of Department

  
Signature of the Examiner







Progressive Education Society's  
**Modern College of Arts, Science and Commerce, Ganeshkhind,**  
Pune-16

## **CERTIFICATE**

*This is to certify that Mr./Miss\_ **Shivaji Angadrao Jadhav\_***

*of Class **TYBA History (Spl-3) Applied History, Seat**  
No. **221033356***

*has submitted the project titled **Ajanta\_ Caves***

*as prescribed by the*

*Savitribai Phule Pune University for the academic year 2022- 2023.*

*[Signature]*  
Teacher in- Charge

*[Signature]*  
Signature of the Examiner

*[Signature]*  
Head of Department





Progressive Education Society's  
**Modern College of Arts, Commerce and  
Science, Ganeshkhind, Pune - 16**

## **CERTIFICATE**

*This is to certify that Mr./Miss. Vanshika Gangasagar Agrahari  
Of Class **TYBA History (DSE -3) Applied History** Seat No. 221033428  
has submitted the project titled 'Weapons used in Peshwa  
Period'.*

*as prescribed by the*

*Savitribai Phule Pune University for the academic year 2022-  
2023.*

*Vanshika Agrahari*

Teacher in- Charge

*Savitribai Phule*

Head of Department

*[Signature]*

Signature of examiner







Savitribai Phule Pune University  
सवित्रीबाई फुले पुणे विद्यापीठ



Progressive Education Society's  
**Modern College of Arts, Science and Commerce, Ganeshkhind,**  
Pune-16

## **CERTIFICATE**

*This is to certify that Mr./Miss Prathamesh Shilavant Ravaji  
of Class **TYBA History (Spl-3) Applied History**, Seat No. 221033416  
has submitted the project titled Glorious Chola Empire*

*as prescribed by the*

*Savitribai Phule Pune University for the academic year 2022- 2023.*

*Prathamesh Shilavant Ravaji*  
Teacher in- Charge

*Savitribai Phule Pune University*  
Head of Department

*Prathamesh Shilavant Ravaji*  
Signature of the Examiner





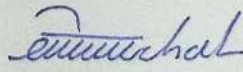
Progressive Education Society's  
**Modern College of Arts, Science and Commerce,**  
Ganeshkhind, Pune-16

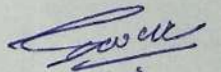
## **CERTIFICATE**


*This is to certify that Mr./Miss- **Bhujbal Om Rohidas**  
of Class **TYBA History (Spl-3) Applied History**, Seat No. 22103343  
has submitted the project titled **Ranjangaon Ganpati***

*as prescribed by the*

*Savitribai Phule Pune University for the academic year 2022- 2023.*

  
Teacher in- Charge

  
Head of Department

  
Signature of the Examiner







Progressive Education Society's

# Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

## CERTIFICATE

This is to certify that, **Ms. Ahilya Vijaykumar Kadam** of M.Sc. II Organic Chemistry has worked on the project entitled, "*Synthesis of heterocyclic compounds by using metal catalyst.*" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni** and **Mrs. Ketaki Kedar Saravate** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

**Project Guide**

**Head,**  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.

**Internal Examiner**

**External Examiner**





Progressive Education Society's

# Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

## CERTIFICATE

This is to certify that, **Mr. Shailesh Balu Shete** of M.Sc. II Organic Chemistry has worked on the project entitled, "*Green Synthesis of pyrazole by using mixed metal oxides.*" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni** and **Mrs. Ketaki Kedar Saravate** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

**Project Guide**

**Head,**  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.

**Internal Examiner**

**External Examiner**



Progressive Education Society's

# Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University, PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

## CERTIFICATE

This is to certify that, **Mr. Manohar Tulshiram Suryavanshi** of M.Sc. II Organic Chemistry has worked on the project entitled, "*Synthesis of pyrazoles by using metal catalyst.*" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni** and **Mrs. Ketaki Kedar Saravate** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

Project Guide

Head

Head,  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.

Internal Examiner

External Examiner



Progressive Education Society's

# Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University, PUN / PN / ASC / 089 (1992)
- UGC - Recognition No. F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

## CERTIFICATE

This is to certify that, **Ms. Komal Ramesh Rakshe** of M.Sc. II Organic Chemistry has worked on the project entitled, "*Mixed metal oxide catalysed synthesis of substituted pyrazoles.*" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni** and **Mrs. Ketaki Kedar Saravate** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

**Project Guide**

**Head**

Head,  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.

**Internal Examiner**

**External Examiner**





Progressive Education Society's

## Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC/089 (1992)
- UGC - Recognition No.: F-5-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that, **Ms. Makhar Pranjal Ramdas** of M.Sc. II Organic Chemistry has worked on the project entitled, "**Synthesis and application of mixed metal oxide catalyst for Knoevenagel Condensation under solvent free conditions.**" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni, Mrs. Revati Nagarkar, Dr. Rucha Purandare** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

  
Project Guide

  
Head of Department

Internal Examiner

  
External Examiner

Head,  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.





Progressive Education Society's

**Modern College of Arts, Science & Commerce**

Re-Accredited by NAAC with 'A' grade

Ganeshkhind, Pune - 411016.

- Permanently Affiliated to Savitribai Phule Pune University, PUN / PN /
- ASC / 089 / (1992)
- UGC - Recognition No. : F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegepk.org

## CERTIFICATE

This is to certify that, **Ms. Shinde Samiksha Sanjay** of M.Sc. II Organic Chemistry has worked on the project entitled, "**Synthesis and application of mixed metal oxide catalyst for Knoevenagel Condensation under solvent free conditions.**" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni, Mrs. Revati Nagarkar, Dr. Rucha Purandare** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

*PPN* *RRP*  
**Project Guide**

*mmci*  
**Head of Department**

Head,  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.

*PPN*  
**Internal Examiner**

*PPN*  
**External Examiner**







Progressive Education Society's

**Modern College of Arts, Science & Commerce**

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University, PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

## CERTIFICATE

This is to certify that the work incorporated in this project entitled **'Formulation of Biofertilizer from the Rhizospheric Isolates of banana and spinach plants'** for the partial fulfillment of the requirement for the award of Degree **'Masters of Science in Microbiology'**, has been carried out by **'Shreeya S. Sontakke'** from Department of Microbiology, at the **'Department of Microbiology, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16,** under my guidance. The candidate will not publish the results either as abstract or manuscript without the consent of the guide.

*Sneha Ogale*

Mrs. Sneha Ogale  
Project Guide

*Neelima Kulkarni*

Dr. Neelima Kulkarni  
Head of Department

HEAD  
Department of Microbiology  
PES's Modern College of Arts, Science  
& Commerce, Ganeshkhind, Pune-16.







Progressive Education Society's

**Modern College of Arts, Science & Commerce**

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University, PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

## CERTIFICATE

This is to certify that the work incorporated in this project entitled '**Isolation, Purification and Screening of Endophytes of *Origanum majorana* (Marwa) for their Plant Growth Promoting Properties and Potential Use as Biofertilizer**' for the partial fulfillment of the requirement for the award of Degree '**Masters of Science in Microbiology**', has been carried out by '**Sujala D. Kulkarni**' from Department of Microbiology, at the '**Department of Microbiology, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16**', under my guidance. The candidate will not publish the results either as abstract or manuscript without the consent of the guide.

*Sneha Ogale*

Mrs. Sneha Ogale  
Project Guide

*Neelima Kulkarni*

Dr. Neelima Kulkarni  
Head of Department

HEAD  
Department of Microbiology  
PES's Modern College of Arts, Science  
& Commerce, Ganeshkhind, Pune-16.





Progressive Education Society's

## Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University, PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091

Fax: 020 25650931

e-mail: moderncollege16@gmail.com

Website: www.moderncollegeregk.org

### CERTIFICATE

This is to certify that the work incorporated in this project entitled **'Isolation and Identification of Endophyte from Medicinal plants and studies on their Phytochemical and Antimicrobial activity'** for the partial fulfillment of the requirement for the award of Degree 'Masters of Science in Microbiology', has been carried out by **'Pranali Prakash Girigosavi and Sakshi Satish Awathe'** from Department of Microbiology, at the **'Department of Microbiology, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16,** under my guidance. The candidate will not publish the results either as abstract or manuscript without the consent of the guide.

Dr. Neelima Kulkarni  
Project Guide

Dr. Neelima Kulkarni  
Head of Department



HEAD  
Department of Microbiology  
PES's Modern College of Arts, Science  
& Commerce, Ganeshkhind, Pune-16.



Progressive Education Society's

## Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University, PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax: 020 25650931  
e-mail: moderncollege16@gmail.com  
Website: www.moderncollegeregk.org

### CERTIFICATE

This is to certify that the work incorporated in this project entitled **'Isolation and Identification of Endophyte from Medicinal plants and studies on their Phytochemical and Antimicrobial activity'** for the partial fulfillment of the requirement for the award of Degree 'Masters of Science in Microbiology', has been carried out by **'Pranali Prakash Girigosavi and Sakshi Satish Awathe'** from Department of Microbiology, at the **'Department of Microbiology, Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16,** under my guidance. The candidate will not publish the results either as abstract or manuscript without the consent of the guide.

Dr. Neelima Kulkarni  
Project Guide

Dr. Neelima Kulkarni  
Head of Department



HEAD  
Department of Microbiology  
PES's Modern College of Arts, Science  
& Commerce, Ganeshkhind, Pune-16.





SYNTHESIS OF EFFICIENT CATALYST FOR KNOEVENAGEL  
CONDENSATION OF ALDEHYDES WITH MALONONITRILE UNDER  
SOLVENT FREE CONDITIONS

**Presented By**

Kadam Nikhil Sanjiv

M.Sc. 2<sup>nd</sup> (Organic Chemistry)

A Project report submitted to:

P.E.S.'s Modern College Of Arts, Science And Commerce

Ganeshkhind, Pune-16

Department Of Chemistry

Under Guidance Of

Mrs. Revati Nagarkar

Dr. Mohini Gupte

Dr. Rucha Purandare

Dr. Madhuri Kulkarni



Progressive Education Society's

## Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade


- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-6-290 / 2005 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that, **Mr. Kadam Nikhil Sanjiv** of M.Sc. II Organic Chemistry has worked on the project entitled, **"Synthesis of efficient catalyst for Knoevenagel Condensation of aldehydes with malononitrile under solvent free conditions."** at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni, Mrs. Revati Nagarkar, Dr. Mohini Gupte** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

  
Project Guide

  
Head of Department,  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 411016

  
Internal Examiner

  
External Examiner



SYNTHESIS OF EFFICIENT CATALYST FOR KNOEVENAGEL  
CONDENSATION OF ALDEHYDES WITH MALONONITRILE UNDER  
SOLVENT FREE CONDITIONS

**Presented By**

Kadam Nikhil Sanjiv

M.Sc. 2<sup>nd</sup> (Organic Chemistry)

A Project report submitted to:

P.E.S.'s Modern College Of Arts, Science And Commerce

Ganeshkhind, Pune-16

Department Of Chemistry

Under Guidance Of

Mrs. Revati Nagarkar

Dr. Mohini Gupte

Dr. Rucha Purandare

Dr. Madhuri Kulkarni





Progressive Education Society's

## Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade


- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-6-290 / 2005 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that, **Mr. Kadam Nikhil Sanjiv** of M.Sc. II Organic Chemistry has worked on the project entitled, **"Synthesis of efficient catalyst for Knoevenagel Condensation of aldehydes with malononitrile under solvent free conditions."** at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni, Mrs. Revati Nagarkar, Dr. Mohini Gupte** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

  
Project Guide

  
Head of Department,  
Dept. of Chemistry,  
PES's Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 411016

  
Internal Examiner

  
External Examiner





SYNTHESIS OF EFFICIENT CATALYST FOR KNOEVENAGEL  
CONDENSATION OF ALDEHYDES WITH MALONONITRILE UNDER  
SOLVENT FREE CONDITIONS

**Presented By**

Pachkawade Achyut Balasaheb

M.Sc. 2<sup>nd</sup> (Organic Chemistry)

A Project report submitted to:

P.E.S.'s Modern College Of Arts, Science And Commerce

Ganeshkhind, Pune-16

Department Of Chemistry

Under Guidance Of

Mrs. Revati Nagarkar

Dr. Mohini Gupte

Dr. Rucha Purandare

Dr. Madhuri Kulkarni



Progressive Education Society's

## Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University PUN / PN / ASC/089(1992)
- UGC - Recognition No. : F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that, **Mr. Pachkawade Achyut Balasaheb** of M.Sc. II Organic Chemistry has worked on the project entitled, "**Synthesis of efficient catalyst for Knoevenagel Condensation of aldehydes with malononitrile under solvent free conditions.**" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni, Mrs. Revati Nagarkar, Dr. Mohini Gupte** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

*PPN* *ush*  
Project Guide

*PPN*  
Head,  
Dept. of Chemistry,  
Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.

*PPN*  
Internal Examiner

*PPN*  
External Examiner





SYNTHESIS OF EFFICIENT CATALYST FOR KNOEVENAGEL  
CONDENSATION OF ALDEHYDES WITH MALONONITRILE UNDER  
SOLVENT FREE CONDITIONS

**Presented By**

Pachkawade Achyut Balasaheb

M.Sc. 2<sup>nd</sup> (Organic Chemistry)

A Project report submitted to:

P.E.S.'s Modern College Of Arts, Science And Commerce

Ganeshkhind, Pune-16

Department Of Chemistry

Under Guidance Of

Mrs. Revati Nagarkar

Dr. Mohini Gupte

Dr. Rucha Purandare

Dr. Madhuri Kulkarni



Progressive Education Society's

## Modern College of Arts, Science & Commerce

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University PUN / PN / ASC/089(1992)
- UGC - Recognition No. : F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that, **Mr. Pachkawade Achyut Balasaheb** of M.Sc. II Organic Chemistry has worked on the project entitled, "**Synthesis of efficient catalyst for Knoevenagel Condensation of aldehydes with malononitrile under solvent free conditions.**" at the Department of Chemistry Modern College, Ganeshkhind, Pune-16 under the supervision of **Dr. Madhuri Kulkarni, Mrs. Revati Nagarkar, Dr. Mohini Gupte** for the partial fulfilment of the degree of Master of Science in Chemistry during the tenure of six months.

*PPN* *ush*  
Project Guide

*Head*  
Head, Dept. of Chemistry,  
Modern College of Arts,  
Science & Commerce,  
Ganeshkhind, Pune - 53.

*[Signature]*  
Internal Examiner

*PPN*  
External Examiner



## CERTIFICATE

Certified that the work incorporated in the dissertation/thesis "Psychological Perspectives in Performing Arts" submitted by Ms. Manvita Jadhav was carried out by the candidate under my supervision/guidance. I declare that this thesis is her original contribution and I recommend that this project work is fit to be evaluated for the partial fulfilment of "Masters in Clinical Psychology" in the Department of Psychology, Modern College Ganeshkhind Autonomous Pune 16

Date: 27/11/2023

Dr. Sadhna Natu

MS. Nirja Ingale

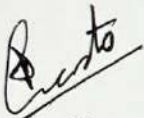
Supervisor





## CERTIFICATE OF THE GUIDE

This is to certify that the work incorporated in the dissertation/thesis A Study Exploring the Concept of Space in Relationship Between Parents and Young Adults, submitted by Ms. Vedija Phalle, was carried out by the candidate under my supervision/guidance. Such material has been obtained from other sources and has been duly acknowledged in the dissertation/thesis.



**Prof.** Nashome Crasto



Dr. Sadhna Natu

Associate Professor and Head,

Department of Psychology,

Modern College Ganeshkhind

Date: 27/01/23

Place: Pune



## CERTIFICATE

Certified that the work incorporated in the dissertation/thesis “PSYCHOLOGICAL PERSPECTIVE IN OFFLINE SHOPPING” submitted by Ms. PRITI RAJENDRA KAMBLE was carried out by the candidate under my supervision/guidance. I declare that this thesis is her original contribution and I recommend that this project work is fit to be evaluated for the partial fulfilment of “Masters in Industrial/Organizational Psychology” in the Department of Psychology, Modern College of Arts, Science and Commerce, Ganeshkhind Pune.

Date: 27/01/2023

  
**Dr. SADHANA NATU**

**Head of Department, Psychology (Supervisor / Research Guide)**

# CERTIFICATE

This is to certify that the work incorporated in the dissertation /thesis  
“(Motivation of UPSC/MPSC aspirants)”, submitted by Ms. Bhakti  
Rajhans, was carried out by the candidate under my  
supervision/guidance. Such material has been obtained from other  
sources and has been fully acknowledged in the dissertation/thesis.

I further declare that the material obtained from other sources has  
been duly acknowledged in the dissertation.



*SAN*  
Dr. Sachhana Natu  
HOD, Psychology

Nashome Crasto

Supervisor/ Research Guide

Department of Psychology,

Modern College Ganeshkhind,

Savitribai Phule Pune University

Date: 27/1/23

Place: Pune



## CERTIFICATE

### ACKNOWLEDGMENT

Certified that the work incorporated in the dissertation/ thesis 'Social Isolation And Loneliness In Older Adults' : submitted by Ms. Neha Kolhatkar was carried out by the candidate under my supervision/guidance. Such material has been obtained from other other sources and has been duly acknowledged in the dissertation/ thesis.

Greatest thanks to Dr. Sadhana Natu; it was only because of her I could understand the essence of Research Methodology and could apply it effectively in my work.

I would like to thank my family and friends without whose support this research would have been incomplete. Though the following dissertation is an individual work, I couldn't have accomplished so much without the help and efforts of my family and my friends who have provided me constant support during my study.

My deepest gratitude to my mother and father Mrs. Leena Kolhatkar and Mr. Anandhika Kolhatkar for being non-judgemental problem listeners and constantly motivating me to achieve my goals and making me believe in my work at hard times.



Dr. Sadhana Natu

Associate Professor and Head,

Department of Psychology,

Modern College Ganeshkhind,

Savitribai Phule Pune University

Date: 27/1/23



Place: Pune



Progressive Education Society's

**Modern College of Arts, Science & Commerce**

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that seven students from MA Part II Department of Psychology, Modern College, Ganeshkhind visited Tapas Elder Care for the duration of 8<sup>th</sup> March to 30<sup>th</sup> March 2023.

The names of the Students are as follows:

Manas Joshi

Eesha Joshi

Mariya Saddikot

Bhakti Rajhans

Anu Yesudoss

Yashada Dixit

Pratik Dhote

Vedija Phalle, Saec Chaudhary

During their visits they obtained an overview of the work in Geriatric Care. They also observed and participated in activities conducted in the Baner and Aundh Centers.

*Sadhana Natu*

Dr Sadhana Natu,

Associate Professor and Head,

Department of Psychology

*Prajakta Wadhavkar*

Prajakta Wadhavkar

Tapas Elder Care



Progressive Education Society's

**Modern College of Arts, Science & Commerce**

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that seven students from MA Part II Department of Psychology, Modern College, Ganeshkhind visited Tapas Elder Care for the duration of 8<sup>th</sup> March to 30<sup>th</sup> March 2023.

The names of the Students are as follows:

Manas Joshi

Eesha Joshi

Mariya Saddikot

Bhakti Rajhans

Anu Yesudoss

Yashada Dixit

Pratik Dhote

Vedija Phalle, Saec Chaudhary

During their visits they obtained an overview of the work in Geriatric Care. They also observed and participated in activities conducted in the Baner and Aundh Centers.

*Sadhana Natu*

Dr Sadhana Natu,

Associate Professor and Head,

Department of Psychology

*Prajakta Wadhavkar*

Prajakta Wadhavkar

Tapas Elder Care





Progressive Education Society's

**Modern College of Arts, Science & Commerce**

Ganeshkhind, Pune - 411016.

Re-Accredited by NAAC with 'A' grade

- Permanently Affiliated to Savitribai Phule Pune University. PUN / PN / ASC / 089 (1992)
- UGC - Recognition No.: F-8-290 / 2006 (CPP-I)
- Best College Award by Savitribai Phule Pune University - 2013
- DST-FIST sponsored college
- STAR College Scheme sponsored by DBT

Tel.: 020-25634021, 25631091  
Fax : 020 25650931  
e-mail : moderncollege16@gmail.com  
Website : www.moderncollegegk.org

### CERTIFICATE

This is to certify that seven students from MA Part II Department of Psychology, Modern College, Ganeshkhind visited Tapas Elder Care for the duration of 8<sup>th</sup> March to 30<sup>th</sup> March 2023.

The names of the Students are as follows:

Manas Joshi

Eesha Joshi

Mariya Saddikot

Bhakti Rajhans

Anu Yesudoss

Yashada Dixit

Pratik Dhote

Vedija Phalle, Saec Chaudhary

During their visits they obtained an overview of the work in Geriatric Care. They also observed and participated in activities conducted in the Baner and Aundh Centers.

*Sadhana Natu*

Dr Sadhana Natu,

Associate Professor and Head,

Department of Psychology

*Prajakta Wadhavkar*

Prajakta Wadhavkar

Tapas Elder Care

## CERTIFICATE

This is to certify that the work incorporated in the dissertation 'Learning International Language: A Self-esteem inquiry', submitted by Ms. Eesha Gajanan Joshi, was carried out by the candidate under my supervision/guidance. Such material has been obtained from other sources has been acknowledged in the dissertation.

Date:

28/1/23

Place: Pune



Dr. Sadhana Natu

Associate Professor and Head,

Department of Psychology,

Modern college

Ganeshkhind, Pune.



## CERTIFICATE

### ACKNOWLEDGEMENT

This is to certify that the work incorporated in the dissertation

**‘PSYCHOLOGICAL PERSPECTIVES IN ONLINE SHOPPING’** submitted

by **Ms. ANJALI AGARWAL**, was carried out by the candidate under my

supervision/guidance. I declare that this thesis is her original contribution and I

recommend that this project work is fit to be evaluated for the partial fulfilment of

“Masters in Clinical Psychology” in the department of Psychology, Modern

college of Arts, science and commerce (Autonomous), Ganeshkhind, Pune.

Date: 27/01/2023

**Dr. SADHANA NATU**

Head of Department, Psychology (Supervisor / Research Guide)




### Certificate of the guide

This is to certify that the work incorporated in the dissertation/thesis "( An Exploratory Study On Homesickness: Factors, Challenges And Coping Mechanisms )" submitted by Ms. Preetika Deshmukh , was carried out by the candidate under my supervision and guidance. Such material has been obtained from other sources and has been duly acknowledged in the dissertation/thesis.

Date: 27/1/23

Supervisor/Research Guide

Nashome Crasto

  
Dr. Sadhana Natu  
(Head of Department)



### CERTIFICATE

This is to certify that the work incorporated in the dissertation "GAINING UNDERSTANDING INTO THE CHALLENGES IN REPRESENTATION OF DISABILITY IN CORPORATE SETTINGS." submitted by Mast. **Siddhesh Velankar**, a second year Master's Student of the Department of Psychology was carried out under my supervision. Such material has been obtained from the other sources and has been duly acknowledged in the dissertation.

Date:

28/1/23



**DR. SADHANA NATU**

**Head of the Department , Psychology**

**(Supervisor)**



## ACKNOWLEDGEMENTS


This is to certify that the work incorporated in the dissertation "**Gender Stereotypes About Kathak Dancers and Dance and Resilience: An Exploratory Study**", submitted by Ms. Yashada Dixit, was carried out by the candidate under my supervision/guidance. Such material has been obtained from others sources and has been duly acknowledged in the dissertation/thesis.

Professor and Head, Department of Psychology, Modern College Ganeshkhind, Savitribai Phule Pune University, for her constant support and guidance.

She helped me ideate my research topic and narrow down the possible ways of approaching the topic. Each discussion we had has been so immersive about every topic! Her vast knowledge about every subject took us around so many new yet simple perspectives to think about, in a very multidisciplinary manner and explore subjects to a much deeper level. Getting the opportunity to study this topic has given me endless inspiration, a very deep-rooted understanding of the art form (Kathak), helped me push my own barriers, contact new people and build connections. It helped me understand the qualitative design better and made me realise how interesting research can be when explored to such extents.

I extend my deep gratitude to my guru, Shrihari Jambale for the immeasurable amount of learnings and inspiration she has given me. For her patient contribution and deep-rooted insights to the research. I would like to appreciate the dancers as well who shared their time and personal experiences for this research.

I would also like to express my gratitude towards the faculty of Psychology, Dr. Anurag Ma'am, Niraja Ingale Ma'am and Prajakta Jori Ma'am for their constant support and understanding through every difficulty.

  
Dr. Sadhana Natu

Associate Professor and Head,

Department of Psychology,

Modern College Ganeshkhind,

Savitribai Phule Pune University

Date:

28/1/23

Place:

Pune





## CERTIFICATE

This is to certify that the work incorporated in the dissertation/thesis "UNDERSTANDING ENGLISH AS A BARRIER IN A CAREER GOAL SETTING" submitted by Ms. ANU YESUDOSS, was carried out by the candidate under my supervision/guidance. Such material has been obtained from other sources and has been duly acknowledged in the dissertation /thesis.

(Owing's Print)

I would like to express my sincere gratitude to my research guide supervisor, Dr. Sadhana Natu, Associate Professor and Head, Department of Psychology, Modern College Ganeshkhind, Savitribai Phule Pune University, for giving me the opportunity to do my research under her guidance. For providing me invaluable guidance throughout the research and keeping me motivated and diligent, her motivation, patience and guidance have been highly inspired me.

I pay my deep sense of gratitude to all the key informant for sharing their expert knowledge and their valuable time. I express my sincere thanks to all the respondents for their participation and time I ask, but not the least, my parents and my sister who always inspire me. So with due regard, I express my gratitude to them.

Date

28/1/23

Place: Pune



Dr. Sadhana Natu

Associate Professor and Head,

Department of psychology,

Modern College Ganeshkhind,

Savitribai Phule Pune 16



# CERTIFICATE

## ACKNOWLEDGEMENT

This is to certify that the work incorporated in the dissertation

**‘PSYCHOLOGICAL PERSPECTIVES IN ONLINE SHOPPING’** submitted

by **Ms. ANJALI AGARWAL**, was carried out by the candidate under my

supervision/guidance. I declare that this thesis is her original contribution and I

recommend that this project work is fit to be evaluated for the partial fulfilment of

“Masters in Clinical Psychology” in the department of Psychology, Modern

college of Arts, science and commerce (Autonomous), Ganeshkhind, Pune.

Date: 27/01/2023

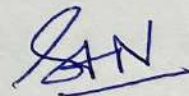
**Dr. SADHANA NATU**

Head of Department, Psychology (Supervisor / Research Guide)



## CERTIFICATE

This is to certify that the work incorporated in the dissertation/thesis 'GENDER DIFFERENTIATION PROCESS IN CIS MALES AND FEMALES': A REFLEXIVE MAPPING, submitted by Mr. Manas Joshi, was carried out by the candidate under my supervision/guidance. Such material has been obtained from other sources and has been duly acknowledged in the dissertation /thesis.



Dr. Sadhana Natu

Associate Professor and Head,

Department of Psychology,

Modern College Ganeshkhind,

Savitribai Phule Pune University

Date: 28/01/2023

Place: Pune.



## CERTIFICATE

This is to certify that the work incorporated in the dissertation 'Learning International Language: A Self-esteem inquiry', submitted by Ms. Eesha Gajanan Joshi, was carried out by the candidate under my supervision/guidance. Such material has been obtained from other sources has been acknowledged in the dissertation.

Date:

28/1/23

Place: Pune



Dr. Sadhana Natu

Associate Professor and Head,

Department of Psychology,

Modern college

Ganeshkhind, Pune.



## CERTIFICATE

This is to certify that the work incorporated in the dissertation "**QUALITATIVE RESEARCH ON EFFECTS OF THERAPY AND NOT TAKING THERAPY ON WOMEN SUFFERING FROM PCOS**" submitted by Ms. Mariya Saddikot, a second year Master's student of the Department of Psychology was carried out by the candidate under my supervision/guidance. I declare that this thesis is her original contribution and I recommend that this project work is fit to be evaluated for the partial fulfillment of "Masters in Clinical Psychology " in the Department of Psychology, Modern College of Arts, Science and Commerce, Ganeshkhind Pune.

Date: 27-01-2023

*Niraja Ingle*

Ms. Niraja Ingle

(Supervisor/ research guide)

Dr.Sadhana Natu

Head of Department, Psychology





Progressive Education Society's  
**Modern College of Arts, Science and  
Commerce, Ganeshkhind, Pune-16**  
Awarded with A+ Grade by NAAC, DST FIST Sponsored  
college with DBT- STAR Status

## CERTIFICATE

This is to certify that Rohini Kanale

from S.Y.B.Sc. (Computer Science) has  
won / participated in Vedic Mathematics  
prize in —

and earned 3 credits. Which was held  
on / between 23/02/23 to 06/04/23

Pratibha  
Co-ordinator

Randhawa  
Head / Vice - Principal

g/d  
Principal







Progressive Education Society's  
**Modern College of Arts, Science and  
Commerce, Ganeshkhind, Pune-16**  
Awarded with A+ Grade by NAAC, DST FIST Sponsored  
college with DBT- STAR Status

# CERTIFICATE

This is to certify that Natasha Deshpande

from FYBA has

won / participated Vedic Mathematics

prize in —

and earned 3 credits. Which was held

on / between 23/2/23 to 6/4/23

Pratibha

Co-ordinator

Dandharkar

Head / Vice - Principal

6/4/23

Principal



Progressive Education Society's  
**Modern College of Arts, Science and  
Commerce, Ganeshkhind, Pune-16**  
Awarded with A+ Grade by NAAC, DST FIST Sponsored  
college with DBT- STAR Status

# CERTIFICATE

This is to certify that Shivam Gupta

from FYBA has

won / participated Vedic Mathematics

prize in -

and earned 3 credits. Which was held

on / between 23/2/23 to 6/4/23



Co-ordinator



Head / Vice - Principal



Principal





Progressive Education Society's

# Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-16

Awarded with A+ Grade by NAAC, DST FIST Sponsored  
college with DBT- STAR Status



## CERTIFICATE

This is to certify that Kishori Bhalekar

from S.Y.B.Sc. (Computer Science) has  
won / participated in Vedic Mathematics  
prize in —

and earned 3 credits. Which was held

on / between 23/2/23 to 6/4/23

Pratibha

Co-ordinator

Mandharkar

Head / Vice - Principal

6/4/23

Principal







Progressive Education Society's  
**Modern College of Arts, Science and  
Commerce, Ganeshkhind, Pune-16**  
Awarded with A+ Grade by NAAC, DST FIST Sponsored  
college with DBT- STAR Status

## CERTIFICATE

This is to certify that Siddharth Nadgir

from FYBA has

won / participated Vedic Mathematics

prize in —

and earned 3 credits. Which was held

on / between 23/2/23 to 6/4/23

Prattha

Co-ordinator

Mandharkar

Head / Vice - Principal

[Signature]

Principal

# अदिती अर्बन



# Aditi Urban

को-ऑप क्रेडिट सोसायटी म. बुलढाणा. र.नं. ३३७

CO-OP. CREDIT SOCIETY LTD. BULDANA R.NO.337

जा.क्र. \_\_\_\_\_

कार्यक्षेत्र : बुलढाणा, जालना, औरंगाबाद

दिनांक 23 MAY 2023

## To WHOMSOEVER IT MAY CONCERN

This is to certify that Kalpesh Gajanan Patil studying 3<sup>rd</sup> (TY) in B.Com (6<sup>th</sup> Semester) bearing Roll No: 222134717 and Division : --- at PE Socity, Modern Arts, Commerce and Science College, Ganeshkhind, Pune 411007 has undergone Management Training at our Aditi Urban CO-OP.Credit Society Ltd.Buldana R.No.337 located at Buldhana in district Buldhana, Maharashtra from 24<sup>th</sup> Feb. 2023 to 30<sup>th</sup> March 2023. The candidate has taken specific training in pricing decision, Contract costing, Process costing Job Costing, accounting for overheads, Cost Accounting records, Account, Sales, Purchase, Stock Audit and inventory Management, and overall knowledge about project components.

We have observed that the candidate is having hard working nature and sincere during the training period and wish him for better prospects in studies as well as in career.

को-ऑप क्रेडिट सोसायटी म. बुलढाणा.  
र.नं. ३३७

For Aditi Urban CO-OP.Credit Society

Ltd.Buldana R.No.337

विभागीय व्यवस्थापक

अदिती अर्बन को-ऑप क्रेडीट

सोसा.म.बुलढाणा र.नं.३३७



मुख्य कार्यालय : जोशी कॉम्प्लेक्स तळमजला, चिंचोले हॉस्पिटलजवळ, सूर्यलर रोड, बुलढाणा फोन नं. 07262-245271, 8390666768

Email ID - aditiurban337@gmail.com





To,  
The Principal  
Modern College of Arts, Science and Commerce  
Ganeshkhind  
Pune

**Sub: Certificate for Internship to Mr. Vedant Nalla (Stock Audits of Kotak Mahindra Bank & Accounting assignments).**

Respected Sir,

Mr. Vedant Nalla has been doing internship with our firm since January 2022 till date. During this period, he has handled various stock audit assignments for Kotak Mahindra Bank, accounting assignments and have assisted in vouching during audits. During this period, we found him to be hard working, honest and sincere in his work.

Thanking You.

Yours faithfully,

**For Charkha Miniya & Co.**

Chartered Accountants

FRN – 0123834W

**CA Sachin Miniya**

Partner

M. No. - 108664

Date: 5<sup>th</sup> May 2023

Place: Pune







HEXAFIN

Hexafin Consultancy Pvt Ltd  
Website: [www.hexafin.com](http://www.hexafin.com)  
Branch Address: First Floor  
Office No. 101,  
Block-III, 403 Loyds Chambers,  
Mangalwar Peth, Pune  
411011, Maharashtra  
GSTIN: 27AADU117543R175

### Internship Letter

05<sup>th</sup> Sept 2022.

Dear Sejal Zanwar,

Pune.

We are delighted to inform you that you have been selected for an internship at **Hexafin Consultancy Pvt. Ltd.** We look forward to welcoming you to our team on 07<sup>th</sup> Sept 2022. As an intern at Hexafin Consultancy Pvt. Ltd., you will be expected to report to the respective branch on your date of joining.

We believe that this internship will provide you with valuable professional experience and contribute to your personal and career growth.

During the internship, you will receive a monthly stipend of Rs. 5000, along with performance-based incentives.

We are committed to providing you with a conducive learning environment and will train you in various skills that are highly relevant in the professional world.

Please find below the address where you need to report for your internship:

Hexafin Consultancy Pvt. Ltd. Pune

On behalf of the entire team, we extend our warmest congratulations on your selection for this internship opportunity. We wish you the very best in all your future endeavours.

Should you have any further queries or require additional information, please do not hesitate to contact us.

Sincerely,

Vaishnavi Tanpure

HR manager

Hexafin Consultancy Pvt. Ltd



**शामराव पायगुडे नागरी साह.**  
**सहकारी पतसंस्था बँक लि.**



**Gokhlenagar, Janwadi road pune 411016**

REF NO:

Date:

TO,

Modern College of Arts, Commerce and Science

Ganesh Khind,

Pune

**Internship Certificate**

This is to certify that "Ms **SANIYA RIYAZ MANIYAR**" has completed the internship period of 60 hours in **SHAMRAO PAYGUDE SAHKARI SANSTHA Bank Ltd** Janwadi Branch, during which we found her disciplined, punctual and honest.

**"We wish Best wishes for her bright future."**



*Lady*

**Branch Manager**

HO.: GOKHLENAGAR JANWADI ROAD PUNE 411016

Phone: 02025650545 /02 Customer Care No.: 7721 900 900, ATM Card Care No.: 7721 800 800 Website:



Progressive Education Society's  
**MODERN COLLEGE OF ARTS, SCIENCE AND COMMERCE**  
Ganeshkhind, Pune - 411 016  
(AUTONOMOUS)



## **AVISHKAR - 2022**

(THE EXPRESSION OF CREATIVITY)

### **CERTIFICATE OF PARTICIPATION**

This certificate is awarded to

Bhujbal Abhishek Dattatraya

In recognition and appreciation for participation in  
**AVISHKAR - 2022 RESEARCH PROJECT COMPETITION**

Held on Thursday, 15<sup>th</sup> September 2022 organized by  
Modern College of Arts, Science and Commerce  
Ganeshkhind, Pune - 16.

**Dr. Ravindra Kshirsagar**  
Academic and Research Co-ordinator



**Dr. Sanjay Kharat**  
Principal





Progressive Education Society's  
**MODERN COLLEGE OF ARTS, SCIENCE AND COMMERCE**  
Ganeshkhind, Pune - 411 016  
(AUTONOMOUS)



## **AVISHKAR - 2022**

(THE EXPRESSION OF CREATIVITY)

### **CERTIFICATE OF PARTICIPATION**

This certificate is awarded to

Bhujbal Abhishek Dattatraya

In recognition and appreciation for participation in  
**AVISHKAR - 2022 RESEARCH PROJECT COMPETITION**

Held on Thursday, 15<sup>th</sup> September 2022 organized by  
Modern College of Arts, Science and Commerce  
Ganeshkhind, Pune - 16.

**Dr. Ravindra Kshirsagar**  
Academic and Research Co-ordinator



**Dr. Sanjay Kharat**  
Principal



Progressive Education Society's  
**MODERN COLLEGE OF ARTS, SCIENCE AND COMMERCE**  
Ganeshkhind, Pune - 411 016  
(AUTONOMOUS)



## **AVISHKAR - 2022**

(THE EXPRESSION OF CREATIVITY)

### **CERTIFICATE OF PARTICIPATION**

This certificate is awarded to

Bhujbal Abhishek Dattatraya

In recognition and appreciation for participation in  
**AVISHKAR - 2022 RESEARCH PROJECT COMPETITION**

Held on Thursday, 15<sup>th</sup> September 2022 organized by  
Modern College of Arts, Science and Commerce  
Ganeshkhind, Pune - 16.

**Dr. Ravindra Kshirsagar**  
Academic and Research Co-ordinator



**Dr. Sanjay Kharat**  
Principal

ABHI





Progressive Education Society's  
**MODERN COLLEGE OF ARTS, SCIENCE AND COMMERCE**  
Ganeshkhind, Pune - 411 016  
(AUTONOMOUS)



# AVISHKAR - 2022

(THE EXPRESSION OF CREATIVITY)

## CERTIFICATE OF PARTICIPATION

This certificate is awarded to

Babur Shreyash

In recognition and appreciation for participation in  
**AVISHKAR - 2022 RESEARCH PROJECT COMPETITION**  
Held on Thursday, 15<sup>th</sup> September 2022 organized by  
Modern College of Arts, Science and Commerce  
Ganeshkhind, Pune - 16.



*[Signature]*

**Dr. Ravindra Kshirsagar**  
Academic and Research Co-ordinator



*[Signature]*

**Dr. Sanjay Kharat**  
Principal





Progressive Education Society's  
**MODERN COLLEGE OF ARTS, SCIENCE & COMMERCE**  
Ganeshkhind, Pune - 411016 (AUTONOMOUS)



**AVISHKAR - 2023**  
(THE EXPRESSION OF CREATIVITY)

**Certificate of Participation**

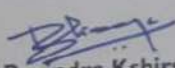
This certificate is awarded to


Kadhane Prasad Sunil (B.Y. Comp.)  
3<sup>rd</sup> Rank

In recognition and appreciation for participation in  
**AVISHKAR - 2023 RESEARCH PROJECT COMPETITION**

Held on Wednesday, 27<sup>th</sup> September 2023 organized by  
Modern College of Arts, Science and Commerce, Ganeshkhind, Pune 411016.



  
**Dr. Ravindra Kshirsagar**  
Academic and Research Co-ordinator

  
**Dr. Sanjay Kharat**  
Principal

APPROVED, IQAC

**Modern College of Arts, Science and Commerce, Ganeshkhind, Pune**  
**M. Sc. II Biotechnology- Student Project List 2022-23**

Roll .no.	Name of the Student	Name of the instit	Name of the guide	Title of the Project (approved by the guide)
223251001	Sumedha Agellu	SPPU	Dr.Shilpy Sharma	Gene expression studies in insulin resistant skeletal muscles
223251002	Aniket Bagate	COEP	DR . Mahesh Shindikar	Green synthesis of nanoparticles using Mentha piperita ( Mint) and their antimicrobial activity agianst milk Borne Pathogens.
223251003	Rohit Bangar	Annasaheb Awate College Manchar	Ingole Sir	
223251004	Bhumika Bharambe	Modern college gk	Dr. Snehal Gagare	gluten hydrolysis activity of bacteria
223251005	Mehul Bhayani	MITCON	Dr. vishal Dawkar	phytochemical analysis of Papaya Leaf (Carica papaya)
223251006	Sanyukta Bhote	BioEra	Dr.Madhav kumar (Dr Asha Salunke)	antibacterial activity of plant extract against blight causing bacteria
223251007	Divya Chatla	BioEra	Dr.pratibha baral (Dr Asha Salunke)	lignocellulosic biomass hydrolysis for production of fermentable sugar
223251008	Nayan Chaudhari	MITCON	Dr. vishal dawkar	Qualitative phytochemical analysis of Drumstick tree (Moringa oleifera)
223251009	Vaishali Chormale	Modern College, GK	Dr Monica Jamala	Studying the effects of seed priming under salt stress on Vigna radiata
223251010	Tanvi Deshpande	OncoDiscover	Dr. Jayant Khandare	Quantitative analysis of sub-cellular localization of fluorescent molecules in cancer cells.
223251011	Ajinkya Gade	modern College Ganeshkhind	Kawaljeet mam	Turmeric mediated synthesis of selenium nanoparticle and it's characterization
223251012	Ketaki Gawade	Modern College, Ganeshkhind	Alisha ma'am	Nutritional analysis of rice grains.
223251013	Bhakti Ghumatkar	Modern college gk	Dr. Snehal Gagare	gluten hydrolysis activity of bacteria from fish
223251014	Devika Godbole	NCMR	Dr. Amarja Joshi	Polyphasic characterization of alkaliphilic bacterial MEB004 isolated from Lonar lake
223251015	Samidha Jadhav	Operon Research Centre	Dr. Pinakin Wagh	
223251016	Pranali Joshi	SPPU	Dr. Santosh Kathwate	
223251018	Dhanashree Kandivkar	SPPU	Dr. Hemant Tarkas	Microbial synthesis of lead sulfide material for its optoelectronic applications
223251019	Rutuja kolapkar	Modern College Ganeshkhind	Kawaljeet mam	Citrus limetta mediated synthesis of selenium nanoparticles and it's characterization
223251020	Nikita Kshirsagar	BioEra	Dr Pratibha baral (Dr Asha Salunke)	bioremediation of melanoidin pigments in distillery spent wash
223251021	Rushikesh Sahebrao Patil	COEP	DR. Mahesh Shindikar	Green syntesis of nanoparticles using Aegle marmelos(indian Bael) and their antimicrobial activity against milk borne Pathogens.
223251022	Chandrashekar Patil	Mitcon	Dr. Vishal Dawkar	phytochemical analysis
223251023	Shivani Salave	Mitcon	Dr vishal Dawkar	Biodegradation of disperse textile dye Brown 3REL by newly isolated spp
223251025	Mrunali Bhosale	Modern College Gk	Alisha maam	Exploring silica nanoparticles for drought stress tolerance in Vigna Radiata
223252051	Akshay Gore	Modern collage Gk	kawaljeet kaur	Green Synthesis Of silver Nanoparticles using Cinnamomum verum and Antimicrobi
223252052	Shrutika Jawalkar	IRSHA Bharti Vidyapeeth	Dr. Rashmi Virkar	Evaluation of antiviral drug compound(s) against SARS- CoV-2 Omicron virus
223252053	Prerna Kadhare	Modern college GK	Dr.Nivedita das	Effects of Polyethylene toxicity on zebrafish (Danio rerio) Is to study on oxidative stress parameters
223252054	Rutuja Suhas Kale	Bioinformatics Centre,	Dr. Payel Ghosh	Construction and analysis of Co-expression Network associated with Abiotic stress in Sorghum bicolor
223252055	Saurabh Kedari	Annasaheb Awate Coll	Ingole Sir	
223252056	Sanjana Khanvilkar	Modern College, GK	Dr. Monica Jamla	study of different priming combinations on vigna radiata under induced cadmium stre
223252057	Sneha Kolpuke	Symbiosis Centre For	Dr. Pooja Singh	Antimicrobial Activity of copper oxide Nanoparticles
223252058	Girish Kulkarni	Modern college Ganes	Dr. Nivedita Das	Gelatin (Fish Scales) Biowaste Extraction and application
223252059	Suraj Munde	MITCON	Dr. Vishal Dawkar	phytochemical analysis

223252060	Sweta Nakhale	SPPU	Dr. Rajendra Harishchandra Patil	Study of CoO nanoparticles against bacterial biofilms
223252061	Rahul Patil	modern College Ganes	kawaljeet kaur	Green Synthesis Of silver Nanoparticles using Cinnamomum Tamala and Antimicrot
223252052	Nikhil Raka	operon reaserch centre	Dr. pikanin wagh	
223252063	Yashodhan Shelke	logical life science	Dr.Nishant Vyas	cd69 expression of t cells when treated with adalimumab monoclonal antibody aggreg
223252064	Pooja Singh	CSIR-CDRI	Dr. Kalyan Mitra	
223252065	Rohan Thakare	operon reaserch centre	Dr. Pinakin Wagh	
223252066	Aishwarya Tonde	modern College Gk	Monica Jamla ma'am	combination seed priming for vigna radiata for salanity stress
223252067	Varsha Andhale	Modern College Gk	Alisha Ma'am	Exploring iron oxide nanoparticles for drought stress tolerance in Vigna radiata.
223252068	Pranjal Shivekar	Modern College Gk	Alisha mam	Exploring silica nanoparticles for drought stress tolerance in Vigna Radiata
223252069	Dhanshree Jamdade	Modern College Gk	Alisha Ma'am	Exploring iron oxide nanoparticles for drought stress tolerance in Vigna radiata.
223252070	Sanket Borg	PDRC	Dr Bulbule	
223252071	Arpita Shejole	Symbiosis Centre For	Dr. Pooja Singh	
223252072	Rohan Mandawade	IRSHA Bharti Vidyapee	Dr.Rashmi Virkar	Evaluation of antiviral drug compound(s) against SARS- CoV-2 Delta virus
223252073	Amol Yalmar	Modern college Gk	Dr.Uttara Oak	Conjunction of ZnO NPs with Amoxicillin drug and it's antibacterial activity
223252074	Vedant Raje		Mr . Amol kapre	
223252075	Balaji Nagre	Modern college gk	Dr. Uttara Oak	Conjunction of ZnO NPs with Vancomycin drug and it's antibacterial activity
223252076	Mugdha Joshi	Modern college gk	Dr. Monica Jamla .	Stress memory responses and seed priming correlate with heavy metal tolerance in p



al activity

SS

cial activity

gates

plants

P. E. Society's

**Modern College of Arts, Science and Commerce, Ganeshkhind, Pune**

**T.Y Biotechnology 2022-23**

<b>Roll no.</b>	<b>Name</b>	<b>Project Title</b>	<b>Supervisor/Project Incharge</b>
223231001	Vaibhavi Awale	Pharmacological and phytochemical analysis of	Ms.Kawaljeet Kaur
223231002	Jayavarshini Balamurugan	effect of cadmium resistant plant growth promoting rhizobacteria on growth and cadmium uptake of wheat	Mrs. Vaishali Randive
223231003	Trushita bharaswadkar	Antibacterial Assessment of Cuttlebone	Dr. Geetanjali Litake
223231004	Drashti Bhatt	Isolation of pectinase producing microorganisms	Ms.Alisha Shaikh
223231005	Akshata Damle	Isolation of Plant Growth Promoting Rhizobacteria for enhancement of Drought stress tolerance	Mrs. Vaishali Randive
223231006	Adwait Dighe	To study Agronomic Traits of Brassica Juncea under	Mrs.Monica Jamla
223231007	Ketaki Ghodke	Antibacterial activity of medicinal plants	Mr. Sagar Anekar
223231008	Sumit Kumar Giri	Isolation of antidiabetic withanolids from withania	Dr. Nivedita Das
223231009	Swarali Gulawani	Characterization & Synthesis of the chitosan nanoparticles	Dr. Snehal Gagare
223231010	Akanksha Gurjar	Characterization & Synthesis of the chitosan nanoparticles	Dr.Snehal Gagare
223231011	Sakshi Jadkar	Biopesticide Production using Trichoderma harzianum	Mr. Sagar Anekar
223231012	Sakshi Jamdade	Phytochemical Potential of Calotropis Plant Antibacterial activity against Gram negative Bacteria	Dr. Tushar Khare
223231013	prasad kaknale	phytochemical potential of Calotropis Plant Antioxidant activity	Dr. Tushar Khare
223231014	Atharva Kelkar	Physico-Chemical Properties of Rice	Dr.Vinay Kumar
223231015	Tithi Khandelwal	Isolation of pectinase producing microorganisms	Ms. Alisha Shaikh
223231016	Dikshita Kondal	Bioplastic from Tapioca Starch	Dr. Monica Jamla
223231017	Himanshu Kulkarni	Text mining of genes responsible for salinity stress in <i>Vigna radiata</i>	Dr. Monica Jamla
223231018	Akhiljith Kumar	Physico-Chemical Properties of Rice	Dr.Vinay Kumar
223231019	Riya Mhatre	Exploring Probiotic Potential of Bacteria from Tilapia nilotica	Dr. Snehal Gagare



223231020	Revati S. Pandit	Analysis of prevalence of hypertension and factors affecting the development of the disease	Dr. Snehal Gagare
223231021	Arikta Raheja	Extraction and study of Tocotrienol as a Dietary Supplement	Mrs. Kaumudi
223231022	Prasad Salunkhe	To Study Agronomic Traits Of Pennisetum Glaucum Under As	Dr. Monica Jamla
223231023	Pranita Siddhapathaki	Bioplastic production from banana peel and cocopeat	Mrs. Kaumudi Kalele
223231024	Sakshi Vidya Sonkusare	Determination of anti-diabetic potential of Withania Coagulans by estimating its enzyme inhibitory activity	Dr. Nivedita Das
223231025	Rushikesh Vijay Thopate	Microbial Pigment Production using <i>Streptococcus</i> spp.	Ms.Kawaljeet Kaur
223231026	Karan R. Ware	To study Agronomic Traits of <i>sorghum bicolor</i> under Arsenic Stress	Dr. Monica Jamla
223231027	Sakshi Mahesh Tilekar	Comparison between Bioplastic produced from Banana peels waste and lima beans peels waste	Mrs. Kaumudi Kalele
223231028	Rugved Prakash Kale	Extraction of ethanol from fruit waste(orange peel)	Dr Gitanjali Litke Mam
223231029	Shrushti Salvi	to study the agronomic traits of mung beans under cd stress	Dr monicaka Jamla
223231030	Neha Shashikant Patil	Synthesis of silver Nanoparticles From Chinaberry leaves	Dr.Kawaljeet Kaur
223231031	Shreya Satish Chavan	Degradation of Azo dye using Microorganisms	Dr. Uttara Oak
223231032	Ashwini Salve	Antibacterial activity of medicinal plants	Mr. Sagar Anekar
223231033	Kamble Sanvendana	Synthesis of iron nanoparticles from spider cobweb and checking its antimicrobial activity in Rhizospheric plants	Ms. Alisha Shaikh
223232061	Sayali Rajendra Bhutare	Determination of anti-bacterial spectrum of Antibiotics against Gram+ve and Gram-ve microorganisms	Dr. Uttara Oak
223232062	Shweta Biradar	Biopesticide Production using Trichoderma viride	Mr. Sagar Anekar
223232063	Vishal Rajendra Gavade	Extraction of Ethanol From Waste Paper	Dr Gitanjali Litke Mam
223232064	Vaishnavi Hulyalkar	Biopesticide production using Trichoderma citrinoviride	Mr. Sagar Anekar
223232065	Kaavya Mahadevan Iyer	Accumulation of Microplastics in freshwater species: a study of molecular damage in <i>Oreochromis niloticus</i> (Nile	Dr. Nivedita Das
223232066	Gayatri Jadhav	isolation of E.coli from ready to eat vegetables	Dr.Geetanjali Litake
223232067	Mrunal Jahagirdar	Plant Growth Promoting Rhizobacteria and their action on Glyphosate	Mrs. Vaishali Randive

223232068	Mallika Kamble	Role of Plant Growth-Promoting Rhizobacteria (PGPR) in Heavy metal tolerance	Mrs. Vaishali Randive
223232069			
223232070	Manasi H Kathe	Glyphosate degradation by Plant Growth Promoting Rhizobacteria(PGPR)	Mrs. Vaishali Randive
223232071	Juned S.Korbu	Phytochemical Potential of Calotropis Plant Antibacterial activity against Gram positive Bacteria	Dr. Tushar Khare
223232072	Sakshi Mane	Isolation and Characterization of Bacteria from Tilapia nilotica	Dr. Snehal Gagare
223232073	Nupur Shriniwas Namjoshi	Assessing the effects of microplastics-induced oxidative stress on freshwater fish: A cytological perspective	Dr. Nivedita Das
223232074	Atharva Shrikant Narwadkar	Effect of Azoxystrobin on maize plant	Dr.Tushar Khare
223232075	Nidhi Palkar	Isolation of pectinase producing microorganisms	Ms. Alisha Shaikh
223232076	Vishvajeet Nimbalkar	Physico-Chemical Properties of Rice	Dr.Vinay Kumar
223232077	Shouryan Patil	Microbial Pigment Production using Proteus penneri	Ms.Kawaljeet Kaur
223232078	Akshada Pawar	Production and comparison of banana peel and black eyed bean bioplastic	mrs. Kaumudi Kalele
223232079	Irawati U. Sawant	Analysis of prevalence of diabetes mellitus Type II and factors affecting the development of the disease	Dr. Snehal Gagare
223232080	Vinit Kiran Sonawane	Effect of lambda cyhalothrin on maize plant	Dr. Tushar Khare
223232081	Om sandip taware	extraction of Ethanol From green peas peel	Dr Gitanjali Litke Mam
223232082	Mrunmayi sasane	Isolation of s.aureus from fresh vegetables	Dr. Geetanjali Litake
223232083	Sejal Dattatray Landage	Production of Biopolymer from coconut waste	Dr. Snehal Gagare
223232084	Nikita Khande	Effect of Plant growth promoting bacteria on plant in salt stress	Mrs. Vaishali Randive
223232085	Abhishek Ashok Patil	Alcohol Production from coconut husk fiber	Dr. Snehal Gagare
223232086	Aditya Nanaso Amrale	Synthesis of Nanoparticles From Neem Leaves	Dr.Kawaljeet Kaur
223232087	Shubhda Pawar	to study the agronomic traits of brassica juncea under arsenic stress	Dr Monica jamla
223232088	Vedant Ghate	Physico-Chemical Properties of Rice	Dr Monica jamla
223232089	Anuja Sherekar	Synthesis of silver Nanoparticles From Neem leaves	Dr.Uttara oak