



# MUGBERIA GANGADHAR MAHAVIDYALAYA

P.O.—BHUPATINAGAR, Dist.—PURBA MEDINIPUR, PIN.—721425, WEST BENGAL, INDIA

NAAC Re-Accredited B+Level Govt. aided College

CPE (Under UGC XII Plan) & NCTE Approved Institutions

DBT Star College Scheme Award Recipient

E-mail : mugberia\_college@rediffmail.com // www.mugberiangangadharmahavidyalaya.ac.in

## Report of certificate course on

### MUSHROOM CULTURE

Period: 5<sup>th</sup> April 2023 to 7<sup>th</sup> September 2023

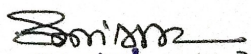
*organized by*

*Department of Botany and Physiology*

## MUGBERIA GANGADHAR MAHAVIDYALAYA

Programme Supervised by: Tanushree De, SACT, Department of  
Botany



  
Principal 5.10.2023  
Mugberia Gangadhar Mahavidyalaya

# Relevance of the certificate course of Mushroom Culture

## Course Objectives:

- Enable the students to identify and poisonous mushrooms,
- Provide hands on training for the preparation of bed for mushroom cultivation and spawn production.
- Give the students exposure to the experiences of experts and functioning mushroom firms.
- Help the students to learn a means of self-employment and income generations.

## Course Outcomes:

By successfully completing the course, students will be able to:

- Identify edible types of mushroom
- Gain the knowledge of cultivation of different types of edible mushrooms and spawn production.
- Manage the diseases and pests of mushrooms.
- Learn a means of self-employment and income generation.

## Course outline

Course code: CRCO1

Duration: 30 Hours

### Module 1: Introduction to mushrooms (2 Hours)

Mushrooms – Taxonomical rank – History and Scope of mushroom cultivation – Edible and Poisonous Mushrooms – Vegetative characters.

### Module 2: Common edible mushrooms (2 Hours)

Button mushroom (*Agaricus bisporus*), Milky mushroom (*Calocybe indica*), Oyster mushroom (*Pleurotus sajorcaju*) and paddy straw mushroom (*Volvariella volvcea*).

### Module 3: Principles of mushroom cultivation (8 Hours)

Structure and construction of mushroom house. Sterilization of substrates. Spawn production – culture media preparation – production of pure culture, mother spawn, and multiplication of spawn. Composting technology, mushroom bed preparation. Spawning, spawn running, harvesting.



Cultivation of oyster and paddy straw mushroom. Problems of cultivation – diseases, pests and nematodes, weed moulds and their management strategies.

**Module 4: Health benefits of mushrooms (2 Hours)**

Nutritional and medicinal values of mushrooms. Therapeutic aspects – antitumor effect.

**Module 5: Post harvest technology (4 Hours)**

Preservation of mushrooms –freezing, dry freezing, drying, canning, quality assurance and entrepreneurship. Value added products of mushrooms.

**Module 6: Training / Workshop / Field visit (12 Hours)**

Sterilization and sanitation of mushroom house, instruments and substrates.

Preparation of mother culture, media preparation, inoculation, incubation and spawn production.

Cultivation of oyster mushroom using paddy straw / agricultural wastes.

**References**

1. Marimuthu, T. et al. (1991) Oyster Mushroom. Department of Plant Pathology. Tamil Nadu Agricultural University, Coimbatore.
2. Nita Bhal (2000) Handbook on Mushrooms. 2<sup>nd</sup> ed. Vol I and II. Oxford and IBH publishing Co. pvt. Ltd., New Delhi
3. Pandey R. K, S. K. Ghosh, (1996). A Hand Book on Mushroom Cultivation. Emkey Publications.
4. Pathak, V. N. and Yadav, N (1998) Mushroom Production and Processing Technology. Agrobios, Jodhpur.
5. Tewari Pankaj Kapoor, S. C (1988) Mushroom Cultivation. Mittal Publication, New Delhi.
6. Tripathi, D. P. (2005) Mushroom Cultivation, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
7. V. N. Pathak, Nagendra Yadav and Maneesha Gaur, Mushroom Production and Processing Technology / Vedams Ebooks Pvt. Ltd., New Delhi (2000).



## Departmental meeting was held on 23.02.2023

### Members present:

1. Sri Manas Khalua, HOD and Assistant Professor, Department of Botany
2. Smt. Tanushree De, SACT, Department of Botany
3. Sri Biswadyuti Bera, SACT, Department of Physiology
4. Smt. Sujaya Mahapatra, SACT, Department of Physiology

### Decision was taken in the meeting:

- (1) The Department of Botany and Physiology are going to organize a Certificate course of Mushroom Culture.
- (2) This topic will be helpful for the students to learn the process of Mushroom Culture.
- (3) It was decided that Smt. Tanushree De, Department of Botany and Smt. Sujaya Mahapatra, Department of Physiology will be program coordinator and course coordinator respectively.
- (4) The tentative schedule of this course will be from 5<sup>th</sup> April to 7<sup>th</sup> September.
- (5) The participant of this course will be the students of UG- 2<sup>nd</sup> SEM, 3<sup>rd</sup> SEM, and 6<sup>th</sup> SEM.
- (6) It was decided that the course will be delivered by lecture, interaction method. Smt. Tanushree De, Department of Botany will forward the matter of this program to academic sub-committee for approval. Smt. Tanushree De, Department of Botany is requested to prepare a routine for smooth running of this course.



# NOTICE FOR CERTIFICATE COURSE OF MUSHROOM CULTURE



## MUGBERIA GANGADHAR MAHAVIDYALAYA

P.O.—BHUFATINAGAR, Dist.—PURBA MEDINIPUR, PIN—781425, WEST BENGAL, INDIA

NAAC Re-Accredited B Level Govt. aided College

CPE (Under UGC XII Plan) & NCTE Approved Institutions

DBT Star College Scheme Award Recipient

E-mail : mugberia\_college@rediffmail.com // www.mugberiangangadharmahavidyalaya.ac.in

Date: 24/03/2023

### Notice

It is a great pleasure to inform that dept. of Botany and Physiology are going to organize a Mushroom Culture Programme to be held on 05/04/2023. All student of dept. Botany are invited to participate in this course.

Venue: Sir Jagadish Chandra Bose Hall (Room No- 328) Department of Botany, Mugberia Gangadhar Mahavidyalaya.

*Tanushree De*

Department of Botany  
Mugberia Gangadhar Mahavidyalaya.

*Swapan Kumar Misra*

Dr. Swapan Kumar Misra  
Principal  
Mugberia Gangadhar Mahavidyalaya  
Principal  
Mugberia Gangadhar Mahavidyalaya



## Participants attendance status

| Name of the Participants | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | D9 | Exam | Total |
|--------------------------|----|----|----|----|----|----|----|----|----|------|-------|
| Sampa Sangram            | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 1    | 8     |
| Krishana Jana            | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 0    | 8     |
| Amrita Maity             | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 1  | 1  | 1    | 8     |
| Saborni Das              | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 0  | 1    | 8     |
| Sangita Karan            | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0    | 4     |
| Kuheli Barik             | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 1  | 1  | 1    | 8     |
| Sunita Mandal            | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1    | 9     |
| Piyali Manna             | 1  | 0  | 1  | 0  | 0  | 1  | 1  | 1  | 0  | 1    | 6     |
| Sova Manna               | 1  | 1  | 1  | 0  | 0  | 1  | 0  | 1  | 0  | 1    | 6     |
| Namita Mondal            | 1  | 0  | 1  | 0  | 0  | 1  | 1  | 0  | 0  | 1    | 5     |
| Suparna Dalapati         | 1  | 0  | 1  | 0  | 0  | 1  | 1  | 1  | 0  | 1    | 6     |
| Ranjita Maity            | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 1  | 0  | 1    | 7     |
| Sonali Khatua            | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 1     |
| Soma Kotal               | 1  | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 1    | 5     |
| Debjani Maiti            | 1  | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 1    | 5     |
| Sumana Samanta           | 1  | 0  | 1  | 0  | 0  | 1  | 0  | 1  | 0  | 0    | 4     |
| Loknath Maiti            | 1  | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0    | 3     |
| Subhadip Manna           | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0    | 2     |
| Mitesh Das               | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0    | 2     |
| Bijay Maity              | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0  | 0  | 1    | 6     |
| Tanmay Das               | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 1     |
| Swargam Bera             | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 1     |
| Satyapriya Mandal        | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 1     |
| Jyoti Maity              | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 1     |
| Bulti Jana               | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 1     |
| Sushmita Giri            | 1  | 1  | 0  | 1  | 1  | 0  | 0  | 1  | 1  | 1    | 7     |
| Surajyashree Dolai       | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    | 1     |
| Subrata Patra            | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 0  | 0  | 1    | 6     |
| Prasenjit Jana           | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 1    | 8     |
| Soumitra Pahari          | 1  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 0    | 3     |
| Soumaya kanta Kar        | 1  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 0    | 3     |
| Suvankar Manna           | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 1    | 7     |
| Soumya Kanti Bhakta      | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 1    | 8     |
| Susmita Maity            | 0  | 1  | 0  | 0  | 1  | 1  | 0  | 0  | 0  | 1    | 4     |
| Dolon Roy                | 0  | 1  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 1    | 2     |
| Sathi Mallik             | 0  | 1  | 0  | 0  | 1  | 1  | 0  | 1  | 1  | 1    | 6     |
| Jharna Sahoo             | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 1    | 2     |
| Supriya Das              | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 1  | 0  | 1    | 4     |
| Barnali Sahoo            | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 1  | 0  | 1    | 5     |
| Rumpa Bera               | 0  | 1  | 0  | 1  | 0  | 0  | 0  | 1  | 0  | 1    | 4     |
| Arpita Mitra             | 0  | 1  | 0  | 1  | 0  | 0  | 1  | 1  | 0  | 0    | 4     |
| Priyanka Roy             | 0  | 1  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 1    | 4     |
| Sourashri Jana           | 0  | 1  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 1    | 3     |
| Atrisha Bhattacharyya    | 0  | 1  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 1    | 4     |



|                    |           |           |           |           |           |           |           |           |           |           |   |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---|
| Sanchita Hudait    | 0         | 1         | 0         | 0         | 0         | 1         | 1         | 1         | 0         | 1         | 5 |
| Santu Kumar Mandal | 0         | 1         | 1         | 0         | 0         | 0         | 1         | 1         | 0         | 1         | 5 |
| Saheb Bhunia       | 0         | 1         | 0         | 0         | 0         | 0         | 1         | 1         | 0         | 1         | 4 |
| Rajesh Santra      | 0         | 1         | 0         | 0         | 0         | 1         | 0         | 0         | 0         | 1         | 3 |
| Sunita Bera        | 0         | 1         | 1         | 1         | 0         | 1         | 1         | 1         | 1         | 1         | 8 |
| Sagar Midya        | 0         | 0         | 1         | 0         | 0         | 0         | 1         | 1         | 0         | 1         | 4 |
| Ankita Dey         | 0         | 0         | 0         | 1         | 1         | 0         | 0         | 1         | 1         | 1         | 5 |
| Pratima Mondal     | 0         | 0         | 0         | 0         | 1         | 0         | 0         | 1         | 0         | 1         | 3 |
| Somnath Manna      | 0         | 0         | 0         | 0         | 1         | 1         | 0         | 0         | 0         | 1         | 3 |
| Sujay Kumar Khara  | 0         | 0         | 0         | 0         | 1         | 1         | 0         | 0         | 0         | 1         | 3 |
| Somnath Jana       | 0         | 0         | 0         | 0         | 1         | 1         | 0         | 0         | 0         | 1         | 3 |
| Sanjib Pal         | 0         | 0         | 0         | 0         | 0         | 1         | 1         | 0         | 0         | 0         | 2 |
| Priya Jana         | 0         | 0         | 0         | 0         | 0         | 1         | 0         | 1         | 0         | 1         | 3 |
| Monika Maity       | 0         | 0         | 0         | 0         | 0         | 1         | 0         | 2         | 0         | 0         | 2 |
| Pitabas Maity      | 0         | 0         | 0         | 0         | 1         | 2         | 0         | 3         | 0         | 4         | 4 |
| Aparna Jana        | 0         | 0         | 0         | 0         | 0         | 1         | 0         | 2         | 0         | 1         | 3 |
| Suprita Maity      | 0         | 0         | 0         | 0         | 0         | 0         | 1         | 1         | 0         | 0         | 2 |
| Swati Samanta      | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 1         | 0         | 0         | 1 |
| Namita Mondal      | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 1         | 0         | 0         | 1 |
| Priyanka Sen       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 1         | 0         | 0         | 1 |
| <b>Total</b>       | <b>35</b> | <b>27</b> | <b>21</b> | <b>15</b> | <b>12</b> | <b>39</b> | <b>32</b> | <b>33</b> | <b>13</b> | <b>43</b> |   |



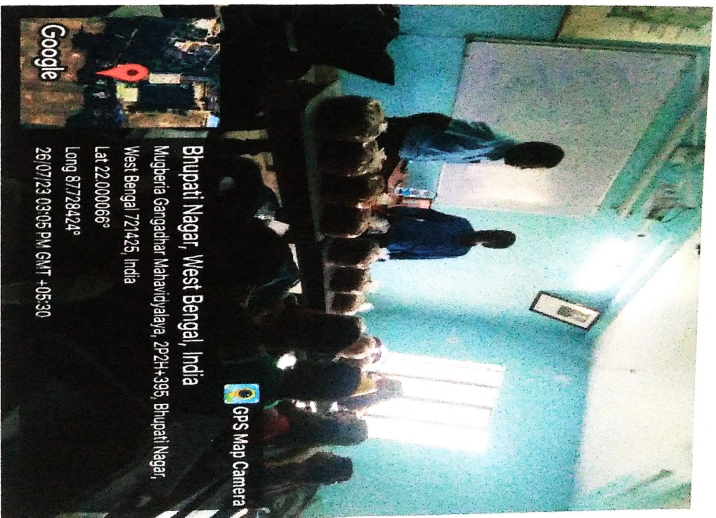
## Results of the examinations

| <i>Students name</i>  | <i>Grade</i> | <i>Students name</i> | <i>Grade</i> |
|-----------------------|--------------|----------------------|--------------|
| Debjani Maity         | A            | Jharna Sahoo         | A            |
| Sourashri Jana        | A            | Ankita Dey           | A            |
| Atrisha Bhattachaijya | A            | Sagar Midya          | A            |
| Priyanka Roy          | A            | Santu Kumar Mandal   | A            |
| Kuheli Barik          | A            | Bijay Maity          | A            |
| Sunita Mondal         | A            | Somnath Manna        | A            |
| Sunita Bera           | A            | Supiya Das           | A            |
| Soumya Kanti Bhakta   | A            | Pitabas Maity        | A            |
| Sampa Sangram         | A            | Somnath Jana         | A            |
| Subhankar Manna       | A            | Saheb Bhunia         | A            |
| Psenjit Jana          | A            | Rajesh Santra        | A            |
| Subrata Patra         | A            | Sujay Kumar Khanra   | A            |
| Amrita Maity          | A            | Rangita Maity        | A            |
| Saborni Das           | A            | Sathi Mallik         | A            |
| Pratima Mondal        | A            | Aparna Jana          | A            |
| Susmita Maity         | A            | Suparna Dalapati     | A            |
| Rumpa Bera            | A            | Namita Mandal        | A            |
| Arpita Mitra          | A            | Dolon Roy            | A            |
| Susmita Giri          | A            | Priya Jana           | A            |
| Sanchita Hudait       | A            | Barnali Sahoo        | A            |
| Sova Manna            | A            | Soumya Kanti Kar     | A            |
| Piyali Manna          | A            | Soumitra Pahari      | A            |
| Sima Kotal            | A            | Jayashree Mandal     | A            |
| Lokhnath Maity        | A            | Krishna Jana         | A            |
| Mitesh Das            | A            | Sumana Samanta       | A            |
| Sangati Karan         | A            | Manika Maity         | A            |
| Suprita Maity         | A            | Sudipa Jana          | A            |
| Priyanka Sen          | A            |                      |              |

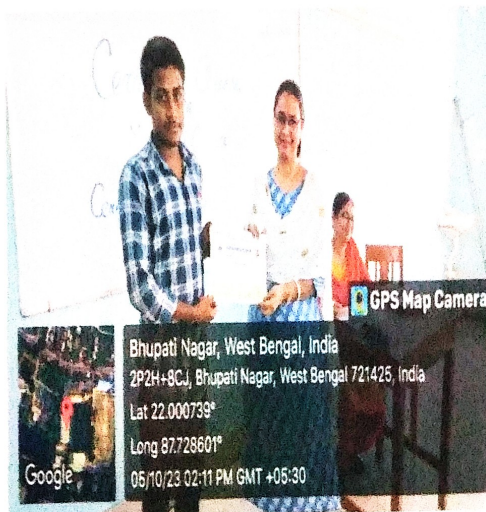
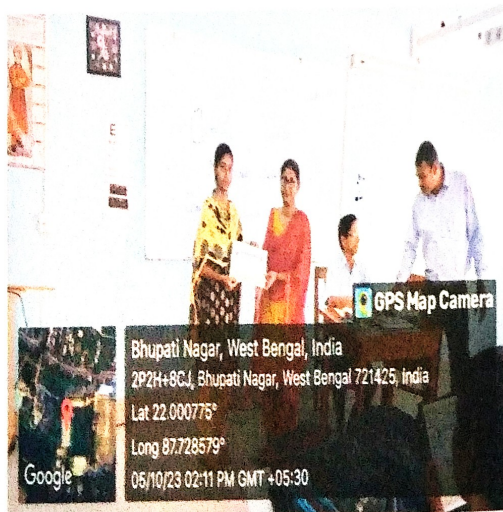
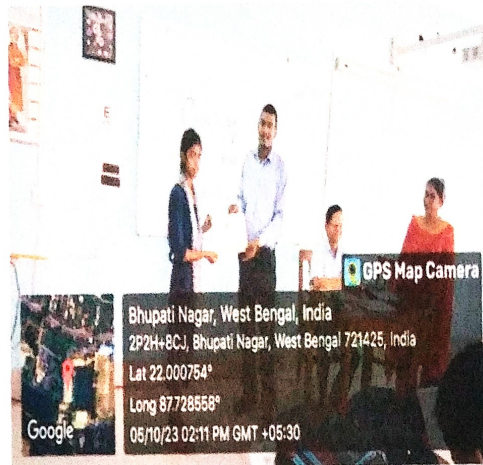
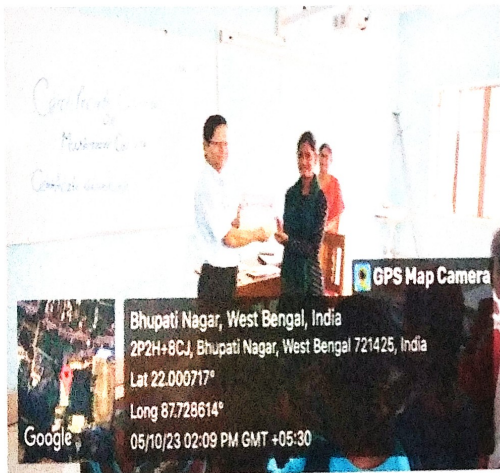
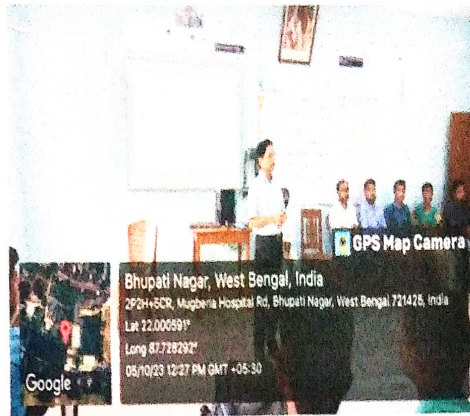




# Practical sessions

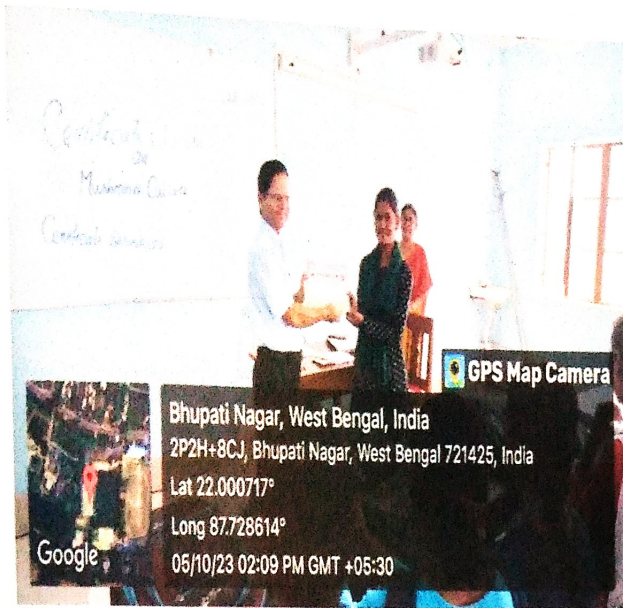


# Certificate distribution

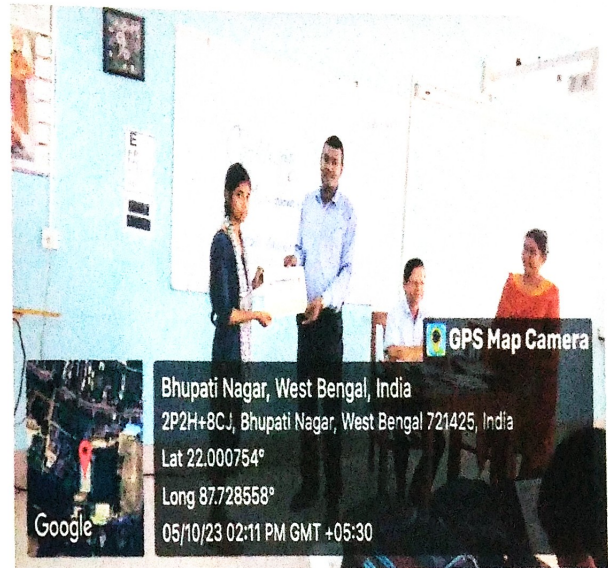


<https://x.com/MugberiaM/status/1710321685621293418?s=08>

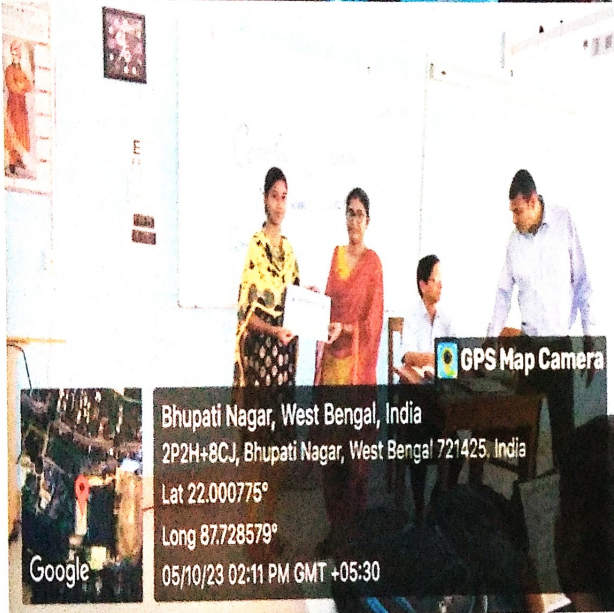




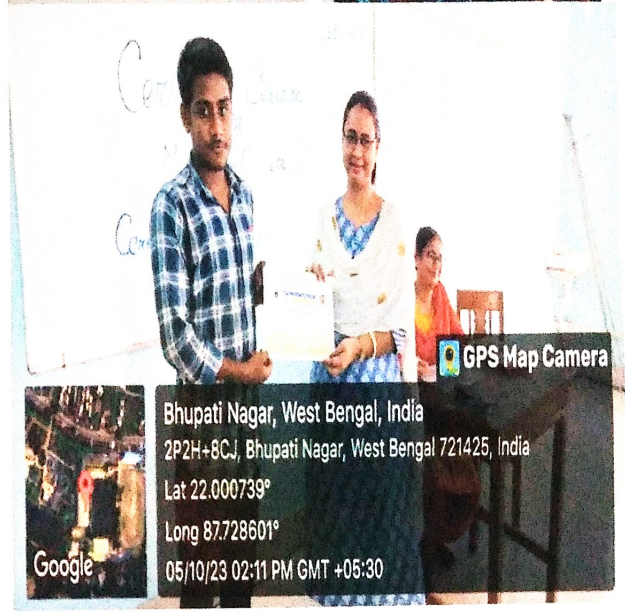
Bhupati Nagar, West Bengal, India  
2P2H+8CJ, Bhupati Nagar, West Bengal 721425, India  
Lat 22.000717°  
Long 87.728614°  
05/10/23 02:09 PM GMT +05:30



Bhupati Nagar, West Bengal, India  
2P2H+8CJ, Bhupati Nagar, West Bengal 721425, India  
Lat 22.000754°  
Long 87.728558°  
05/10/23 02:11 PM GMT +05:30



Bhupati Nagar, West Bengal, India  
2P2H+8CJ, Bhupati Nagar, West Bengal 721425, India  
Lat 22.000775°  
Long 87.728579°  
05/10/23 02:11 PM GMT +05:30



Bhupati Nagar, West Bengal, India  
2P2H+8CJ, Bhupati Nagar, West Bengal 721425, India  
Lat 22.000739°  
Long 87.728601°  
05/10/23 02:11 PM GMT +05:30

*[Handwritten Signature]*

28.12.2023

**Principal**  
Mugberia Gangadhar Mahavidyalaya

