

# SHRI LAL BAHADUR SHASTRI DEGREE COLLEGE, GONDA

(Affiliated to Dr. Ram Manohar Lohiya Avadh University,  
Ayodhya, (U.P))



**Department of Botany**

**Mushroom Cultivation**

**Certificate course**

**2023-2024**

From

, Dr. Rekha Sharma

Department of Botany

Shri Lal Bahadur Shastri Degree College, Gonda.

To,

The Principal,

Shri Lal Bahadur Shastri Degree College, Gonda.

Sub: Proposal for Certificate Course in Mushroom Cultivation

Respected Sir,

With reference to above mentioned subject, I am submitting herewith the proposal to conduct certificate course in Mushroom Cultivation for the session 2023-2024 by the Department of Botany of our college. This course will be helpful to the students to learn spawning, bed preparation and harvesting technique of mushroom cultivation.

Kindly approve this course for B.Sc. and M.Sc. students and oblige.

with regards.

**Date :25/07/2023**

**Place: S.L.B.S. D.C. Gonda**

**Sincerly your's**



**(Dr. Rekha Sharma)**

**Assistant Professor**

Enclosure: 1. Proposal.

2. Curriculum & Design for the Course.

# Shri Lal Bahadur Shastri Degree College, Gonda (Affiliated to Dr. Ram Manohar Lohiya Avadh University, Ayodhya ,(U.P)

## Proposal for conducting Short Term Certificate Courses

### 1. Basic information about the applicant department:

- ❖ **Name of the College:** : Shri Lal Bahadur Shastri Degree College, Gonda
- ❖ **Complete Postal Address of College** : Civil Lines, U.P.- 271003.
- ❖ **Name of the Department** : Botany

### 2. Details of Course Proposal:

- ❖ **Name of the course** : Certificate Course in Mushroom Cultivation
- ❖ **Target Group** : Under Graduate /Post Graduate Students
- ❖ **Duration of the Course** : 30 Hrs.
- ❖ **Medium of Instructions** : Hindi/English
- ❖ **No. of candidates to be registered:** 72

### 3. Details of the faculty:

- Whether college has any degree/diploma : YES (UG course)  
related to the proposed course: Mushroom Cultivation as subject
- Whether the course is prepared by experts: YES (By Departmental Faculty)

#### From related field:

- Information of Course Coordinator (To be appointed for the course)

Name	Department	Qualification	Experience
Dr. Rekha Sharma	Botany	M.Sc. Ph.D.	30 years

➤ Information of Faculty Members (To be appointed for the course)

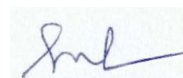
Sr. No	Name of Faculty Member	Qualification	Experience (In Years)
01	Prof. S.K Srivastava	M.Sc. Ph.D.	32 years
02	Dr. Rekha Sharma	M.Sc. Ph.D.	30 years
03	Dr. Sanjay Kumar	M.Sc. Ph.D.	3.8 years
04	Dr. Priyanka Srivastava	M.Sc. Ph.D.	3.5 years
05	Krishna Mohan Ttripathi	M.Sc. B.Ed.	2 years
06	Drinkal Yadav	M.Sc. B.Ed.	2 years

4. Details of the Physical Infrastructure Needed / Available for The Course:

➤ Classroom:	Available
➤ Books / Reading Material:	Yes, available in the Central/ Departmental Library of the College.
➤ Equipment's:	All the Necessary Equipment's Required for the Course are available
➤ Any Other:	The College has its own Computer Laboratory with Internet Connection.



(Signature of the course coordinator )



(Signature of the Head of the Department )

# SHRI LAL BAHADUR SHASTRI DEGREE COLLEGE, GONDA

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## Department of Botany

(Certificate Course in Mushroom Cultivation)

### Certificate Course

Syllabus 2023-2024

#### Unit I

### Theories of Mushroom Cultivation

#### Syllabus

#### **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)**

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 in 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). Oster Mushroom. Department of Plant Pathology. Tamil Nadu Agricultural University, Coimbatore.
2. Nita Bhal. (2000). Handbook on Mushrooms. 2nd 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)

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(Affiliated to Dr. Ram Manohar Lohiya Avadh University, Ayodhya, (U.P))

## Department of Botany

(Certificate Course in Mushroom Cultivation)

### Certificate Course

Syllabus 2023-2024

Course Name	Name of Paper	Lecturers/Week	Total No. of Lectures	Theory	Practical	Total Marks
Certificate Course	Mushroom cultivation	06	30	25	05	100



(Signature)

Faculty of Botany



(Signature)

Principal

# SHRI LAL BAHADUR SHASTRI DEGREE COLLEGE, GONDA

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Ayodhya, (U.P))

**Department of Botany**

(Certificate Course in Mushroom cultivation)

Ref. No. ....

Date. 31/08/2023

## Notice

All the students of Botany are hereby informed that the department of Botany is going to organize an add-on course under the title “**Mushroom cultivation**”. Students willing to join the course register their names with the teacher's in charge.



(Signature)  
Faculty of Botany



(Signature)  
Principal









