



Govt. College for Women
(AUTONOMOUS) - GUNTUR. 1942 (Estd.)
College with Potential for Excellence

DEPARTMENT OF MICROBIOLOGY



A Certificate course in
MUSHROOM CULTIVATION
From 26-10-2023 to 25-11-2023

CIRCULAR:

GOVERNMENT COLLEGE FOR WOMEN (A), GUNTUR

DEPARTMENT OF MICROBIOLOGY

CIRCULAR

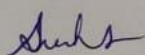
17-10-2023

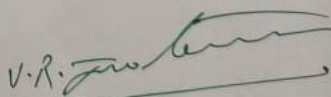
All the I Semester students of B.Sc. Major Microbiology are informed that the department of Microbiology is conducting a certificate course on MUSHROOM CULTIVATION scheduled from 26-10-2023 to 25-11-2023. This course is useful for your career prospects.

Course details:

1. Course Fee – Free
2. Duration – 30 hrs.
3. No. of seats – 30
4. Course Timings – 4PM to 5 PM
5. Maximum credits for the course – 2

All the I sem students of B.Sc Major Microbiology may consult in the department of Microbiology for further details and registration process.


Head of Department


Principal
PRINCIPAL
GOVT. COLLEGE FOR WOMEN (A)
GUNTUR.



Govt. College for Women (AUTONOMOUS) - GUNTUR. 1942 (Estd.) College with Potential for Excellence

DEPARTMENT OF MICROBIOLOGY

A CERTIFICATE COURSE IN MUSHROOM CULTIVATION

About the certificate course: The course enables the students to identify edible and poisonous mushrooms and also gives the students exposure to the experience of experts and functioning mushroom farm. This course helps students to learn a means of self-employment.

OUTCOMES OF CERTIFICATE COURSE: At the end of the course the student will

- Identify edible types of Mushrooms.
- Gain knowledge of cultivation of different types of edible mushrooms and spawn production.
- Learn a means of self-employment and income generation.

The course is designed and developed by the course coordinator and the following faculty taught the course

Dr. K.Sucharitha

Smt.P.Aruna

Smt. N.Sravani

Course Details:

- Number of Participants: 30
- Duration of the course: 30 hours

Criteria of Assessment

- Summative: At the end of the course.

Number of Credits: 2

Eligibility Criteria to get the certificate

- 75 % attendance
- Attending both Formative and Summative Assessment.
- Securing minimum of 40% marks.

Timings: 4 PM TO 5 PM

Venue: Microbiology Lab, Government Women's college, Guntur.

Course starting date: 26-10-2023

Course ending date: 25-11-2023

The course is conducted in offline

CERTIFICATE COURSE ON MUSHROOM CULTIVATION
(Certificate course- 30 hrs)
SYLLABUS

Course Objectives:

- Enable the students to identify edible 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 farms
- Help the students to learn a means of self-employment and income generation

Course outcome: 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

Unit 1: Introduction to mushrooms (10 hours)

Mushrooms -Taxonomical rank -History and Scope of mushroom cultivation - Edible and Poisonous Mushrooms-Vegetative characters; Common edible mushrooms: Button Mushroom (*Agaricus bisporous*), Oyster mushroom (*Pleurotus sajorcaju*), Paddy straw mushroom (*Volvariella volvacea*), Milky Mushroom (*Calocybe indica*); Other economically important and medicinal mushroom- Shiitake Mushroom (*Lentinula edodes*), Kabul Dhingri (*King Oyster*); Health benefits of mushrooms: Nutritional and medicinal values of mushrooms.

Unit 2: 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 milky mushrooms. Problems in cultivation - diseases, pests and nematodes, weed moulds and their management strategies.

Unit III: Post harvest technology & Training/ Workshop/ Field visit

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

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.
1. 5.Tewari Pankaj Kapoor, S. C. (1988). Mushroom Cultivation. Mittal Publication, New Delhi.
5. Tripathi, D.P. (2005) Mushroom Cultivation, Oxford & IBH Publishing Co. PVT.LTD, New Delhi.
6. V.N. Pathak, Nagendra Yadav and Maneesha Gaur, Mushroom Production and Processing Technology/ Vedams Ebooks Pvt Ltd., New Delhi (2000)

RESOLUTION:

Resolution-19

The faculty members of department of microbiology met on 14/9/23 to discuss about the observation of International microorganism day - 17/9/23 and certificate course.

- It is resolved to observe the International microorganism day on 16/9/23 (Saturday) as it falls on Sunday (17/9/23).
- It is resolved to conduct a rangoli competition on the theme "pathogenic microorganisms" to all the life sciences students of I, II, III years.

It is resolved to schedule the certificate course on "Mushroom cultivation" from 26/10/2023 to 25/11/2023 to the I year students (2023-24)

Government College For Women (A), Guntur

Department Of Microbiology

Certificate Course On Biofertilizers And Organic Farming

STUDENTS ENROLLMENT LIST

S.No	Name of the student	Course
1.	P.Anusha	I B.Sc. Major Microbiology
2.	P.Subhashini	I B.Sc. Major Microbiology
3.	T.Manasa	I B.Sc. Major Microbiology
4.	Ch.Krishnaveni	I B.Sc. Major Microbiology
5.	Ch.Poojitha	I B.Sc. Major Microbiology
6.	R.Sravanthi	I B.Sc. Major Microbiology
7.	Y.Blessy	I B.Sc. Major Microbiology
8.	N.Sravanthi	I B.Sc. Major Microbiology
9.	B.Sruthi	I B.Sc. Major Microbiology
10.	K.Sravanthi	I B.Sc. Major Microbiology
11.	B.Durga bhavani	I B.Sc. Major Microbiology
12.	B.Akshara	I B.Sc. Major Microbiology
13.	K.Sangeetha	I B.Sc. Major Microbiology
14.	G.Pravallika	I B.Sc. Major Microbiology
15.	D.Meenakshi	I B.Sc. Major Microbiology
16.	D.Sharon princy	I B.Sc. Major Microbiology
17.	V.Lakshmi prasanna	I B.Sc. Major Microbiology
18.	Sk.Mubeena sulthana	I B.Sc. Major Microbiology
19.	G.Sumalatha	I B.Sc. Major Microbiology
20.	N.Venkata ramana	I B.Sc. Major Microbiology
21.	G.Sowjanya	I B.Sc. Major Microbiology
22.	B.Vishnu priya	I B.Sc. Major Microbiology
23.	M.Charmi	I B.Sc. Major Microbiology

Government College For Women (A), Guntur

Department Of Microbiology

Certificate Course On Biofertilizers And Organic Farming

AWARD LIST

	Name of the student	Course	Marks (50)	Attendance 30 days
23404001	B.Vishnu Priya	I B.Sc. Major Microbiology	46	30
23404002	B.Sruthi	I B.Sc. Major Microbiology	44	29
23404003	B.Akshara	I B.Sc. Major Microbiology	40	28
23404004	Durga bhavani	I B.Sc. Major Microbiology	40	25
23404005	Ch.Poojitha	I B.Sc. Major Microbiology	38	30
23404006	Ch.Krishnaveni	I B.Sc. Major Microbiology	38	28
23404007	D.Meenakshi	I B.Sc. Major Microbiology	38	28
23404008	D.Sharon Princy	I B.Sc. Major Microbiology	36	30
23404009	G.Pravallika	I B.Sc. Major Microbiology	40	29
23404010	G.Sumalatha	I B.Sc. Major Microbiology	40	29
23404011	G.sowjanya	I B.Sc. Major Microbiology	40	30
23404014	M.Charmi	I B.Sc. Major Microbiology	38	30
23404015	N.Sravanthi	I B.Sc. Major Microbiology	42	28
23404016	N.Venkata ramana	I B.Sc. Major Microbiology	44	30
23404017	P.Anusha	I B.Sc. Major Microbiology	40	28
23404018	P.Subhashini	I B.Sc. Major Microbiology	40	28
23404019	R.Sravanthi	I B.Sc. Major Microbiology	40	29
23404020	Mubeena sulthana	I B.Sc. Major Microbiology	38	27
23404021	T.Manasa	I B.Sc. Major Microbiology	36	29
23404022	V.Lakshmi prasanna	I B.Sc. Major Microbiology	38	29
23404023	Y.Blessy	I B.Sc. Major Microbiology	42	29

(2023-24)

26/10/2023 - 25/11/2023

53

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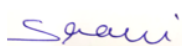
GOVERNMENT COLLEGE FOR WOMEN (A)

GUNTUR, ANDHRA PRADESH

DEPARTMENT OF MICROBIOLOGY

CERTIFICATE COURSE

This is to certify that Ms Ch.Krishnaveni of I B.Sc. Microbiology Honours has successfully completed a Certificate course in MUSHROOM CULTIVATION conducted by the Department of Microbiology from 26-10-2023 to 25-11-2023 and fulfilled all prerequisites as per UGC norms, for award of credits.



Course Coordinator



Incharge of Department



Principal

Department of Microbiology
Certificate course on mushroom cultivation-Question paper
2023-24

Time : 2 Hours

Max marks:50 M

Section-A

Write short answers for any ten of the following questions

10X2=20M

1. List out the value added products of mushrooms
2. List two common edible mushrooms and their distinctive features
3. Identify two key toxins found in poisonous mushrooms and describe their effects on the human body
4. What are the quality assurance factors for mushrooms
5. Define spawn and write the substrates used in spawn production
6. Explain the importance of sanitation in a mushroom house in two points
7. Write about the Nutritional values of mushrooms
8. Draw the diagram of life cycle of mushrooms
9. Name one key nutrient found in shiitake mushrooms and its potential health benefits
10. List out the requirements for mother culture preparation

Section-B

Answer any two questions

2X5=10 M

11. List out any three poisonous mushrooms with their identifying characters
12. Write a note on medicinal mushrooms
13. Explain about the importance of pest management in mushroom cultivation.
14. Write about the history and scope of mushroom cultivation

Section-c

Answer any two questions

2X10=20 M

15. Explain the different methods available for preserving mushrooms and discuss their effectiveness
16. . Compose a note discussing the steps involved in cultivating oyster mushrooms with paddy straw as the primary growing medium
17. Discuss the various methods used to manage diseases, pests, and nematodes in mushroom farming
18. Describe the characteristics and culinary applications of common edible mushrooms