S R & B G N R GOVERNMENT ARTS & SCIENCE COLEGE (A), KHAMMAM

DEPARTMENT OF BOTANY

VALUE ADDED COURESE

ON

MUSHROOM CULTIVATION

(2020- 2021)

NUMBER SEATS	COURSE DURATION	DATES
40 Seats for each batch	30 Hours (20 hrs Theory + 10 hrs Practical)	February 2021

S R & B G N R GOVERNMENT ARTS & SCIENCE COLLEGE (A), KHAMMAM
DEPARTMENT OF BOTANY
VALUE ADDED COURSE ON MUSHROOM CULTIVATION TECHNOLOGY
Scheme of Examination and Syllabus

Introduction

Mushrooms are being used as food and medicine from ancient times. Mushroom contains all essential amino acids, vitamin B complex, iron, calcium, potassium, phosphorous, folic acid and other biochemical compounds. It is also a good source of dietary fibre. It is regarded as highly edible even for people suffering from cholesterol problems, heart diseases, diabetes and cancer. Mushroom cultivation has now become a source for income generation since there is a large demand for healthy and quality food products. Many value added products are also obtained from mushrooms. The cultivation procedure is characterised by small initial investment and year round production. It is an eco-friendly agricultural practice. Considering the commercial viability and self-employment potential of mushroom cultivation and marketing, the Department is offering the same as an add on certificate course to the under graduate students of the College.

Aims of the Course

- To enable the students to identify the edible and poisonous mushrooms.
- To provide hands-on training for the preparation of bed for mushroom cultivation and its harvesting, pests and diseases control and post harvesting management.
- To provide the students awareness about the marketing trends of Mushrooms.
- To give the students exposure to the experiences of experts in the field and to functioning mushroom farms.
- To help the students to learn a means of self-employment and income generation.

Duration of Course: The course shall extend over a period of three months (40hrs).

Admission Procedure: Candidates for admission to the course should be students of the New College, Chennai. Interested students shall apply for admission at the time of notification in the prescribed form. Examinations S. No.Paper Marks 1. Paper I – Theory 100 2. Paper II – Practical 80 3. Internal Assessment 20 Total 200 Certificates will be issued to the candidates on successful completion of the course

S R & B G N R GOVERNMENT ARTS & SCIENCE COLLEGE (A), KHAMMAM
DEPARTMENT OF BOTANY
VALUE ADDED COURSE ON

MUSHROOM CULTURE TECHNOLOGY

DURATION: 30 Hrs **Paper: BOT: 301**

SYLLABUS

Course objectives

- To facilitate self-employment.
- To know the nutrient value of mushroom.
- To study the morphology and types of Mushrooms.
- To know the spawn production technique.
- To aware the identification of edible and poisonous Mushrooms.
- To learn the prospects and scope of mushroom cultivation in small scale industry.
- To understand the Diseases. Post harvesting techniques of Mushrooms

UNIT – I **(15 Hrs)**

1. Introduction & History: medicinal value of edible Mushrooms: Poisonous Mushrooms: Types of edible mushrooms available in India- Volvariellavolvacea, Pleurotuscitrinopleatus, Agarics bisporus
2. Cultivation Technology, Infrastructure: Substrates (locally available) Polythene bags, Vessels, Inoculation hook, Inoculation loop, Low coat stove, Steves, Culture rack, Mushroom unit, (Thatched House) Water sprayer, Tray, Small Polythene bag.
3. Pure Culture: Medium, Sterilization, Preparation of spawn, Multiplication, Mushroom bed preparation, Paddy straw, Sugarcane trash, Maize straw, Banana leaves.
4. Factors affecting the Mushroom bed preparation: low cost technology, Composting technology in Mushroom production

UNIT – II **(15Hrs)**

1. Storage: short term (Refrigeration- upto 24 hours) Long term storage (canning, pickles, papads) drying, storage in salt solutions.
2. Nutritional value of mushrooms: Proteins, amino acids, mineral elements, carbohydrates crude fibre content vitamins .
3. Food preparation: types of food prepared from mushroom .Research centers-national level and regional level, cost benefit ratio .marketing in India and abroad. Export value.

Suggested Readings

1.Dubey R.C 2005 A Text book of Biotechnology S.Chand&co New Delhi

2. Kumaresan V .2005 Biotechnology. Saras publications New Delhi

3. John JothiPrakash E 2004 outlines of plant Biotechnology. Emkay publications Delhi

4. Sathe T.V 2004 Vermi culture and Organic Farming Daya publications New Delhi

COURSE OUTCOME

1. Students study the morphology and types of Mushrooms.
2. They are aware of the identification of edible and poisonous Mushrooms.
3. Studied the technique of Mushroom cultivation
4. Students will be able produce spawn on their own.
5. Learned the prospects and scope of mushroom cultivation in small scale industry.
6. Understood the Diseases. Post harvesting techniques of Mushrooms

S R & B G N R GOVTERNMENTARTS & SCIENCE COLLEGE (AUTONOMOUS)
KHAMMAM

VALUE ADDED COURSES

APPLICATION FORM

Name of the course: Mushroom Technology

Department: Botany

Name of the Course: General / Specific

Name of the Student:

Register No. :

Class:

Address:

Fee Paid: No registration fee

DECLARATION

I----------would like to enroll in the ----------Value Added Course, I will abide by the rules and regulations of the College.

Date: Signature of the Student

S R & B G N R GOVTERNMENTARTS & SCIENCE COLLEGE (AUTONOMOUS)
KHAMMAM

Value Added Course
On
Mushroom Cultivation Technology
Model Question Paper
Paper: BOT: 301

Time: 45 Mints **Max. Marks: 30**

I. An objective questions30 will be given, each question carries one mark. All questions should be answered with in a time limit of 45 mints

SR & BGNR GOVT ARTS & SCIENCE COLLEGE (A), KHAMMAM

Model Question Paper

Certificate Course Examination

Paper Title: Mushroom Cultivation Technology (Practical)

Time: 02 Hours Max.Marks:10

Question 1: Identify and comment on 02

a) Specimen/Chart

b) Instrument used in Mushroom cultivation technology 02

Question 2: Identify and classify 01

Question 3: Preparation of spawn/ raw material/ mushroom cultivation 05

SR&BGNR Government Arts &Science College (A), Khammam
Department of Botany
Value Added Course onMushroom Cultivation Technology
Paper: BOT: 301

Duration: 45 Mins **Max. Marks: 30**

Name of the Student: **Mark Secured:**

Hall Ticket Number:

Sl. No.	Answer	Sl. No.	Answer
1		16	
2		17	
3		18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	

FACULTY INVOLVED IN CERTIFICATE COURSE

1. Sri. M.A. Arif
2. Dr. G. Valya
3. Dr. Ch. Chaitanya
4. Sri. G. Surendra Reddy
5. Sri. S. Babu

LIST OF STUDENT PARTICIPATED IN CERTIFICATE COURSE

2619 2503	B.Ramya	BZC - III T/M
2504	B.Sai Priya	BZC - III T/M
2505	B.Bhavitha	BZC - III T/M
2506	B.Akhila	BZC - III T/M
2507	Ch.vamshi	BZC - III T/M
2508	D.Sri harsha	BZC - III T/M
2509	G.Shakeena	BZC - III T/M
2511	K.Gopi	BZC - III T/M
2512	K.Gopala krishna	BZC - III T/M
2513	K.Satheesh	BZC - III T/M
2515	K.Akhil	BZC - III T/M
2516	k.Veerandar rao	BZC - III T/M
2518	K.Venkatesh	BZC - III T/M
2519	L.Rama Krishna	BZC - III T/M
2520	L.Naresh	BZC - III T/M
2521	M.Venkateswarlu	BZC - III T/M
2522	M.Madhumitha	BZC - III T/M
2523	M.Suprya	BZC - III T/M
2525	Kumari	BZC - III T/M
2526	M.Sai krishna	BZC - III T/M
2528	N.Ramya krishna	BZC - III T/M
2529	N.SriRam	BZC - III T/M
2530	P.Keerthana	BZC - III T/M
2531	P.Akhila	BZC - III T/M
2532	P.Sowmya	BZC - III T/M
2533	P.Sravani	BZC - III T/M
2535	S.Rajesh	BZC - III T/M
2536	S.Prudhvi Raj	BZC - III T/M
2537	S.Triveni	BZC - III T/M
2538	Sk.Aayesha	BZC - III T/M
2539	Sk.Asha Bee	BZC - III T/M
2541	Sk.Khasim Bee	BZC - III T/M
2543	T.Prahlad	BZC - III T/M
2544	T.Khasim saheb	BZC - III T/M
2548	V.Mounika	BZC - III T/M
2550	V.Vijaya laxmi	BZC - III T/M
2551	V.Kalpana	BZC - III T/M
2552	V.Mahesh	BZC - III T/M
2553	Y.Manoj	BZC - III T/M

SR & BGNR GOVERNMENT ARTS & SCIENCE COLLEGE(A)

Khammam :: Telangana-507002

Value Added Course on

Mushroom Cultivation Technology

This is to certify that Mr/ Ms .....Class .....of SR & BGNR GOVERNMENT Arts & Science College(A), Khammam has successfully completed the Value Added Course organized by **the Department of .....BOTANY...**from .....to .....

Principal

Co-ordinator