

## CERTIFICATE COURSE IN MUSHROOM CULTIVATION

**Objectives:**

To enable student – To acquire Knowledge of Mushroom Cultivation

**Duration of the Course:**

Certificate: 6 months

Diploma: 1 Year

**Eligibility:**

Any student enrolled in the degree program of the college.

<b>Subjects covered under Certificate Course are Sr No. 1, 2 and 3</b>	
<b>Name of Paper</b>	<b>Credits</b>
GC-MC-01T Mushroom Cultivation - I	06
GC-MC-02T Mushroom Cultivation - II	06
GC-MC-03P Practical and Project - I	06 (Lab Only)

## **Mushroom Cultivation-I**

**Total Marks: 100**  
**External Marks: 70**  
**Internal Marks: 30**  
**Credits: 6**  
**Pass Percentage: 40%**

### **Section-A**

**Unit-I** - Introduction to specify Mushrooms, Status & scope of Mushrooms cultivation.

**Unit-II** – Isolation of pure mushrooms culture, Maintenances and presumption of Mushrooms culture.

### **Section-B**

**Unit III** - Hang method of composting for button mushrooms

- Short method of composting for button mushrooms
- Introduction and cultivation techniques for oyster mushrooms
- Introduction and cultivation techniques for shitake mushrooms
- Economics of mushrooms cultivation.

**Unit IV** - Preparation of Mushroom value – added products

- Mushroom diseases and their management
- Pest management of mushrooms

## **Mushroom Cultivation-II**

**Total Marks: 100**

**External Marks: 70**

**Internal Marks: 30**

**Credits: 6**

**Pass Percentage: 40%**

### **Section-A**

**Unit I** - Important features of edible fungi  
- Nutritional & Medicinal values of mushrooms

Unit II - Spawn preparation teachings  
- Biotechnological appearances for mushrooms  
- Strain improvement

### **Section-B**

**Unit III** - Introduction and cultivation techniques for milky mushrooms  
- Paddy straw mushrooms  
- Crop management practices  
- Packaging and marketing of mushrooms.

**Unit-IV** - Mushroom nematodes and their management  
- Recycling of spent mushroom substrate  
- Post - harvest shelf life of mushroom

## **Project & Practical-III**

**Total Marks: 100**  
**External Marks: 70**  
**Internal Marks: 30**  
**Credits: 6**  
**Pass Percentage: 40%**

### **Practical:**

- Methodology of substrate pre treatment
- Preparation and composting of substrate
- Tissue culture, Master Culture and spawn preparation techniques
- Growth Studies in liquid medium

### **Project:**

**Max Marks: 50**

### **References**

- (1) AcharyaK, RoyA and SarkarJ (2020) Mushroom Cultivation Technology. Techno World, New Delhi
- (2) Thakur T and Thakur M P (2015) Production Techniques of Tropical Mushrooms. Nirmal Publications, New Delhi.
- (3) Aneja K R and Mehrotra RS (2015) An Introduction to Mycology. New Age International Publishers, New Delhi