

# **JAMSHEDPUR WOMEN'S UNIVERSITY**

## **CERTIFICATE COURSE IN MUSHROOM CULTIVATION TECHNOLOGY**

### **(1 Year Programme)**

### **ADMISSION INFORMATION**

#### **INTRODUCTION**

Mushroom cultivation does not need vast fields, sowing, ploughing, irrigation, and other requirements like conventional cultivation. It just needs proper knowledge and command on the technique of growing mushrooms indoors. This is one of the most profitable businesses flourishing in recent times with potential markets available everywhere. Their skill can add a feather to their mushroom business. All the female candidates who have successfully completed their Intermediate can enroll in this program. The Certificate course is also open to all the students who are pursuing their undergraduate or postgraduate subjects in any stream- arts, science and commerce alongwith the other regular studies as an additional course. This is a small step towards the fulfilling of the SKILL INDIA MISSION ('Kaushal Bharat, Kushal Bharat'). Strength of India lies in Empowerment of Indian Women; more educated and well versed young indian women are the face of new India. Women entrepreneurs are the need of time.



Sl.No	Information	Dates
1.	Eligibility for Admission	Bachelor Degree with any stream ( Art, Science and Commerce) with 45% Marks
2.	Fee structure	Rs 15,000 /- Per semester
3.	Course Duration	2 Semesters

# Mushroom Cultivation Technology

Mushroom cultivation does not need vast fields, sowing, ploughing, irrigation, and other requirements like conventional cultivation. It just needs proper knowledge and command on the technique of growing mushrooms indoors. This is one of the most profitable businesses flourishing in recent times with potential markets available everywhere. A well organized course on the technique of growing mushrooms will definitely make one stand out from the crowd. Their skill can add a feather to their mushroom business. All the female candidates who have successfully completed their Intermediate can enroll in this program. The Certificate course is also open to all the students who are pursuing their undergraduate or postgraduate subjects in any stream- arts, science and commerce alongwith the other regular studies as an additional course. This is a small step towards the fulfilling of the SKILL INDIA MISSION ('Kaushal Bharat, Kushal Bharat'). Strength of India lies in Empowerment of Indian Women; more educated and well versed young indian women are the face of new India. Women entrepreneurs are the need of time. This is a one year certificate course which would provide the candidates- Theoretical/Practical knowledge, tips for intensive mushroom growth, guidance for further production in large scale and lifelong incentives of being a student of a reputed government institute. All these in a brief period of time of one year.

## **Eligibility Criteria:-**

The female candidates who have passed 10+2 Arts/Science/Commerce or pursuing

B.A./ B.Sc /B.Com (any semester).

## **Fee Structure**

15000/- per semester

## **Course Structure and Syllabus**

### **Semester I**

Theory: Unit 1: Introduction, history. Nutritional and medicinal value of edible mushrooms: Poisonous mushrooms. Types of edible mushrooms available in India – *Volvariella volvacea* (Straw mushroom) *Pleurotus ostreatus* ( oyster mushroom), *Agaricus bisporus* (button mushroom).

Unit 2: Cultivation Technology: Infrastructure: substrates (locally available) Polythene bag, vessels, Inoculation hook, inoculation loop, low cost stove, sieves, culture rack, mushroom unit

(Thatched house) water sprayer, tray, small polythene bag. Pure culture: Medium, sterilization, preparation of spawn, multiplication. Mushroom bed preparation paddy straw, sugarcane trash, maize straw, banana leaves. Factors affecting the mushroom bed preparation - Low cost technology. Composting technology in mushroom production.

## Practicals

1. Sterilization and sanitation of mushroom house, instruments and substrates
2. Preparation of mother culture, media preparation, inoculation, incubation and spawn production
3. Any other practical related with mushroom cultivation

## Semester II

Unit 1: Storage and nutrition: Short-term storage (Refrigeration -upto 24 hours) Long term Storage (canning. Pickles, papads). Drying, storage in salt solutions. Nutrition - Proteins – amino acids, mineral elements nutrition- Carbohydrates, and Crude fibre content - Vitamins.

Unit 2: Food Preparation: Types of foods prepared from mushroom Research Centers- National level and Regional level. Cost benefit ratio - Marketing in India and abroad, Export Value.

Practicals/ Project Work: Cultivation of mushroom using paddy straw