

Course Code	Course Name	Credits
26BT954	MUSHROOM CULTIVATION TECHNOLOGY	02

Course Description

This course provides hands-on training in mushroom cultivation techniques, focusing on real-time production processes. Learners will practice substrate preparation, spawning, crop management, harvesting, and post-harvest handling using locally available materials. The course also aims to develop entrepreneurial skills for setting up small-scale mushroom farming units for income generation and self-employment.

Course Objectives

- To train learners in setting up a basic mushroom cultivation unit.
- To develop hands-on skills in substrate preparation and sterilization.
- To enable learners to carry out spawning and manage growth conditions.
- To train students in identifying and controlling pests and diseases in cultivation settings.
- To provide practical knowledge of harvesting, grading, and packaging.

Skill Enhancement Outcomes

After completing the course, learners will be able to:

- Prepare compost/substrate using agricultural waste (straw, sawdust, etc.).
- Perform sterilization, spawning and bag filling techniques independently.
- Maintain temperature, humidity, and ventilation in a growing room.
- Monitor crop growth and troubleshoot common cultivation problems.
- Identify contamination and apply corrective measures.
- Harvest mushrooms at the correct stage and handle them properly.
- Set up and manage a small mushroom production unit with minimal investment.

Course Content and Practical Training

- Introduction to edible and non-edible mushrooms
- Basic tools and equipment used in mushroom farming, safety measures and sterilisation.
- Techniques of mushroom cultivation: Oyster, Button, Milky, Shiitake etc.
- Selection of suitable environmental conditions for cultivation
- Preparation of substrate (straw, sawdust, compost, etc.)
- Spawn production and inoculation techniques
- Bag method and tray method of cultivation
- Maintenance of temperature, humidity, and sanitation
- Disease and pest management in mushroom cultivation
- Harvesting techniques and post-harvest handling
- Drying, packaging, and storage methods
- Basics of marketing, branding, and selling mushrooms
- Cost estimation and small business planning
- Waste management

Learning Outcome

At the end of the course, learners will be able to independently cultivate mushrooms, manage production systems efficiently, and establish a small-scale mushroom farming enterprise for sustainable income generation.