

Course Code	Course Name	Credits
26BY951	MUSHROOM CULTIVATION	02

Course Description

This course covers the basics of mushroom biology, nutritional and medicinal value, and types of edible and poisonous mushrooms. It introduces cultivation techniques, including infrastructure, spawn preparation, composting, and casing, along with methods for growing important species like *Agaricus bisporus*, *Pleurotus ostreatus* and *Volvariella volvacea*. It also includes pest and disease management, storage methods, value-added products and an overview of mushroom research and marketing in India and worldwide.

Course Objectives

- To understand mushroom biology and types.
- To learn their nutritional and medicinal importance.
- To study cultivation techniques and practices.
- To develop skills in mushroom production and management.
- To understand storage, processing, and marketing.

Skill Enhancement Outcomes

Upon successful completion of this course, the learner will be able to:

- Learn practical mushroom cultivation techniques.
- Build confidence to pursue self-employment and entrepreneurial opportunities.
- Recognize business opportunities and effectively manage a small-scale enterprise.
- Identify edible and poisonous mushrooms.
- Manage cultivation infrastructure and sanitation.
- Control pests and diseases in mushrooms.
- Develop skills in storage, processing, and marketing.

Course Content and Practical Training

- Introduction to mushroom cultivation, history and economic importance.
- Study of mushroom biology, types of edible and poisonous mushrooms.
- Nutritional and medicinal value of mushrooms.
- Infrastructure setup: mushroom house, equipment and materials required.
- Preparation of pure culture and different types of spawn.
- Compost preparation using long and short methods (LMC & SMC).
- Mushroom bed preparation and environmental factors affecting growth.
- Casing preparation and maintenance of hygiene and sanitation.
- Cultivation techniques of common edible mushrooms.
- Identification and management of pests and diseases.
- Harvesting, post-harvest handling and storage methods.
- Preparation of value-added mushroom products and basic marketing skills.

Learning Outcome

By the end of this course, students will have a clear understanding of mushrooms and will be able to tell which ones are safe to eat and which are not. They will gain hands-on experience in growing mushrooms, from preparing spawn and compost to managing the crop and handling pests and diseases. Students will also learn how to harvest, store and process mushrooms, helping them feel confident to start small-scale mushroom farming or related business activities.