

Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim-Goa				
Name of Faculty: Dr Tanvi Nitin Prabhu		Subject: Botany		
Paper code: BOT 321 (Mushroom Cultivation Technology)		Program: T.Y.B.Sc		Batch: - NA
Academic year: 2025 - 2026		Semester: V		Total Practicals/Labs: 15
Credits: 01				
Course Objectives: 1. Train students in basic mushroom cultivation techniques. 2. Impart knowledge of pest and disease management and post-harvest technology. 3. Upskill students for mushroom entrepreneurship and research.				
Expected Course Outcome: 1. Identify important cultivated edible mushroom species available in India. 2. Develop basic skills in spawn production, substrate preparation and mushroom cultivation. 3. Recognize and manage mushroom diseases and pests. 4. Create employment opportunities through mushroom cultivation and motivate them for research				
Student Learning Outcome: 1. Identify important cultivated edible mushroom species available in India. 2. Develop basic skills in spawn production, substrate preparation and mushroom cultivation. 3. Recognize and manage mushroom diseases and pests. 4. Create employment opportunities through mushroom cultivation and motivate them for research				
Month	Practicals/Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books

June 2025	27.06.2025	01	Basidiocarp morphology of oyster mushroom; L.S. of basidiocarp, section through gill and mounting of spores.	17
July 2025	04.07.2025	01	Basidiocarp morphology of button mushroom; L.S. of basidiocarp, section through gill and mounting of spores.	
	11.07.2025	01	Preparation and sterilization of media (Malt Extract Agar and Potato Dextrose Agar).	
	18.07.2025	01	Preparation and sterilization of media (Malt Extract Agar and Potato Dextrose Agar).	
	25.07.2025	01	Preparation and sterilization of media (Malt Extract Agar and Potato Dextrose Agar).	
August 2025	08.08.2025	01	Initiation of culture from mushroom tissues and spores.	
	22.08.2025	01	Preparation of spawn and substrate for oyster mushroom cultivation and milky white mushroom cultivation.	
	29.08.2025	01	Preparation of spawn and substrate for oyster mushroom cultivation and milky white mushroom cultivation.	
September	12.09.2025	01	Preparation of spawn and substrate for oyster mushroom cultivation and milky white mushroom cultivation.	
	19.09.2025	01	Inoculation and bagging of substrate using oyster mushroom spawn and milky white mushroom spawn.	
October	03.10.2025	01	Debagging, initiation of fruiting and harvesting of oyster mushrooms.	
	10.10.2025	01	Casing, initiation of fruiting and harvesting of milky white mushrooms. Mushroom preservation – drying, storage in brine and pickle making. Packaging and marketing of fresh and dry mushroom products.	