

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: 2026 - 2027		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 2026	25.06.2026	01	Basidiocarp morphology of oyster mushroom; L.S. of basidiocarp, section through gill and mounting of spores.	NIIR Board (2006). Handbook of Mushroom Cultivation, Processing and Packaging. National Institute of Industrial Research, New Delhi.
July 2026	02.07.2026	01	Basidiocarp morphology of button mushroom; L.S. of basidiocarp, section through gill and mounting of spores.	
July 2026	09.07.2026	01	Preparation and sterilization of media (Malt Extract Agar and Potato Dextrose Agar).	
July 2026	16.07.2026	01	Preparation and sterilization of media (Malt Extract Agar and Potato Dextrose Agar).	
July 2026	23.07.2026	01	Preparation and sterilization of media (Malt Extract Agar and Potato Dextrose Agar).	
July 2026	30.07.2026	01	Initiation of culture from mushroom tissues and spores.	
August 2026	06.08.2026	01	Preparation of spawn and substrate for oyster mushroom cultivation and milky white mushroom cultivation.	
August 2026	13.08.2026	01	Preparation of spawn and substrate for oyster mushroom cultivation and milky white mushroom cultivation.	
August 2026	20.08.2026	01	Preparation of spawn and substrate for oyster mushroom cultivation and milky white mushroom cultivation.	
August 2026	27.08.2026	01	Inoculation and bagging of substrate using oyster mushroom spawn and milky white mushroom spawn.	
September 2026	03.09.2026	01	Debagging, initiation of fruiting and harvesting of oyster mushrooms.	
September 2026	10.09.2026	01	Casing, initiation of fruiting and harvesting of milky white mushrooms.	
	24.09.2026	01	Mushroom preservation – drying, storage in brine and pickle making.	
October 2026	01.10.2026	01	Packaging and marketing of fresh and dry mushroom products.	
October 2026	08.10.2026	01	Journal certification	

Assessment Rubrics

Component	Max. Marks
ISA 1	NA
ISA 2	NA
ISA 3	NA
Practical	25
Semester End Exam	NA