

Semester Lecture Plan (Theory)

Name of the college: Government College of Arts, Science and Commerce, Sanquelim							
Name of Faculty: Dr. Tanvi Nitin Prabhu			Subject: Botany				
Paper code: BOT 321			Program/Course: B.Sc (Botany)			Division: A	
Academic Year: 2026-27			Semester: V			Total Lectures: 15	
Course Objectives: • Train students in basic mushroom cultivation techniques. • Impart knowledge of pest and disease management and post-harvest technology. • Upskill students for mushroom entrepreneurship and research.							
Expected Course Outcome: On completion of the course, students will be able to • Identify important cultivated edible mushroom species available in India. • Develop basic skills in spawn production, substrate preparation and mushroom cultivation. • Recognize and manage mushroom diseases and pests. • Create employment opportunities through mushroom cultivation and motivate them for research							
Student Learning Outcome: • Identify important cultivated edible mushroom species available in India. • Develop basic skills in spawn production, substrate preparation and mushroom cultivation. • Recognize and manage mushroom diseases and pests. • Create employment opportunities through mushroom cultivation and motivate them for research							
Month	Lectures		No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
	From:	To:					
June 2026	24.06.2026	27.06.2026	01	Introduction: Biology of mushroom and mushroom cultivation		PowerPoint presentation	Biswas, S, Datta, M and Ngachan, SV (2012). Mushrooms:
June 2026-July	29.06.2026	04.07.2026	01	Morphology, diagnostic characters, reproduction, life cycle		PowerPoint	

2026				and nutritional value of <i>Agaricus bisporus</i>		presentation	A Manual for Cultivation. PHI Learning Private Limited, New Delhi.
July 2026	06.07.2026	11.07.2026	01	Morphology, diagnostic characters, reproduction, life cycle and nutritional value of <i>Agaricus bisporus</i>		PowerPoint presentation	
July 2026	13.07.2026	18.07.2026	01	Morphology, diagnostic characters, reproduction, life cycle and nutritional value of <i>Agaricus bisporus</i>		PowerPoint presentation	
July 2026	20.07.2026	25.07.2026	01	Morphology, diagnostic characters, reproduction, life cycle and nutritional value of <i>Calocybe indica</i>		PowerPoint presentation	
July 2026 – August 2026	27.07.2026	01.08.2026	01	ISA 1 (Assignment) Morphology, diagnostic characters, reproduction, life cycle and nutritional value of <i>Calocybe indica</i>		PowerPoint presentation	
August 2026	03.08.2026	08.08.2026	01	Morphology, diagnostic characters, reproduction, life cycle and nutritional value of <i>Pleurotus spp.</i>		PowerPoint presentation	
August 2026	10.08.2026	15.08.2026	00				
August 2026	17.08.2026	22.08.2026	01	Morphology, diagnostic characters, reproduction, life cycle and nutritional value of <i>Pleurotus spp.</i>		PowerPoint presentation	
August 2026	24.08.2026	29.08.2026	01	Mushroom classification based on occurrence, habitat, colour and morphology of fruiting bodies.		PowerPoint presentation	
August 2026 - September 2026	31.08.2026	05.09.2026	01	Important features of edible and non-edible mushrooms (common look-alike mushrooms). Cultivation of button, oyster and milky white mushrooms - spawning, casing, cropping, picking and packing		PowerPoint presentation	
September 2026	07.09.2026	12.09.2026	01	Mushroom spore isolation and spore culture; pileus tissue culture; culture media (Potato Dextrose Agar, Malt Extract Agar)		PowerPoint presentation	
September 2026	14.09.2026	19.09.2026	00	Ganesh Chaturthi break			
September 2026	21.09.2026	26.09.2026	01	Preparation of spawn and substrate, sterilization and storage.		PowerPoint presentation	
September 2026-October	28.09.2026	03.10.2026	01	Preparation of spawn and substrate, sterilization and storage.		PowerPoint presentation	

2026							
October 2026	05.10.2026	10.10.2026	01	Infrastructure requirement of a mushroom firm - composting technology, pasteurization room and growing rooms.		PowerPoint presentation	
October 2026	12.10.2026	14.10.2026	01	Revision		PowerPoint presentation	

Assessment Rubrics

Component	Max Marks
ISA 1 (Theory)	7.5
Practical	NA
Project	NA
Semester End Exam	60