

# GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS)

KUMBAKONAM – 612 001

Affiliated to Bharathidasan University

DST - CURIE Sponsored Institution

IV Cycle of Accreditation



☎ 0435 – 2401391

✉ principal@gcwk.ac.in



## DEPARTMENT OF BOTANY- UNDER GRADUATE

SL. NO	COURSE CODE	COURSE NAME	ISSUED ADDRESSED	FOCUS OF THE COURSE
1.	18BOC406 / U21BOC40 7	Anatomy and Embryology Micro technique	Professional Ethics	Classification of meristems - apical meristems and lateral meristems intercalary meristem, various concepts of apical meristem theories, apical cell theory, Ultra structure of pollen wall – structure, development and types of ovules, megasprogenesis, Megagametogenesis.
2.	18BOC203/ U21BOC20 3	Microbiology & Plant Pathology and Plant Protection	Professional Ethics	Bacteria – Discovery, General characteristics and cell structure, Viruses – Discovery, general structure, Symptoms of virus infection in plants; Plant Pathology: Classification of plant diseases and Scope.
3.	U21BO3N ME1:2	Laboratory Techniques	Professional Ethics	Preservation of plant materials, fixation, stains, preparation of medium for culture, PDA, MS Media.
4.	U21BO4N ME2:2	Seed pathology	Human Values	History of Seed Pathology-Importance in agriculture -losses caused by seed borne diseases; Seed health testing for fungi, bacteria and viruses: Principles and methods.
5.	U21BO6M BE2:2	Preservation of fruits and vegetables	Human Values	Principles of preservation, Methods of preservation - refrigeration, freezing, canning, drying and dehydration, chemical preservatives. Preparation of jam, jelly juice squash, pickles, etc..
6.	18BO5EC3/ U215BOSE 2	Medical and Applied Botany	Human Values	Importance and relevance of herbal drugs in Indian Systems of Medicine. Pharmacognosy – aim, scope and branches. Photochemical – reserve materials;



  
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7.	U18BO5EC 1:3	Biological control	Human Values	Biological control of pathogens of aerial parts - Microorganism on aerial parts pathogens on aerial parts Infection through unbroken plants surfaces or Natural opening- wounds dead plants parts - latent infection.
8.	U214BOSE 1/ SBMT	Skill Based – Mushroom technology	Environment and Sustainability, PE	History of Mushroom cultivation – economic importance of Mushroom as food – selection ‘starter’ – preparation of spawn – preparation of Compost (outdoor and indoor beds )– incubation – Harvesting and marketing.
9.	U21BOC61 4	Plant Ecology and Conservation	Environment and Sustainability	General Ecology – Approaches to the study of Ecology, Autecology – Synecology, Plant environment – climatic, Ecosystem concept – components biotic-biotic-autotrophic producers & heterotrophic consumers, biomass-ecological pyramids, Productivity – primary, secondary & gross; food chain – food web & energy flow – pond ecosystem.
10.	SBBH / U21BO5M BE1:1	Skill Based - Bio resources and human welfare	Environment and Sustainability	Study of plants for the source and application of the following products, beverage (coffee), narcotics (poppy) fiber (Cotton), oil-seeds (sesame), latex (rubber), start up for plant based industries in Tamil Nadu Importance and application areas: biomass production - food (single cell proteins); bio-fertilizers. Environmental Biotechnology: Waste treatment – solid (compost), Liquid (industrial effluents), sewage treatment (domestic sewage).



  
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11.	U21BO6M BE3:2	Environmental Biotechnology	Environment and Sustainability	Source and treatment of polluted water and effluents; Biological treatment of sewage characteristics of sewage and objectives in sewage treatment; Activated sludge process - trickling filters; Anaerobic digestion. Treatment of industrial effluents using bioreactors.
12.	18BOC101 / U21BOC10 1	Algae, Fungi and Lichens	Environment and Sustainability	Classification of algae, Economic importance Morphology and life-cycles of the following: <i>Nostoc</i> , <i>Chlamydomonas</i> , <i>Oedogonium</i> , <i>Vaucheria</i> , <i>Diatoms</i> , <i>Ectocarpus</i> , <i>Dictyota</i> , <i>Polysiphonia</i> . Economic importance of algae. Fungi – General characteristics, life cycle of <i>Rhizopus</i> (Zygomycota) <i>Penicillium</i> , <i>Alternaria</i> (Ascomycota), <i>Puccinia</i> , <i>Agaricus</i> (Basidiomycota); Economic importance.



  
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