


"Education for Knowledge, Science and Culture"
-Shikshanmaharashi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)
Department of Biotechnology Optional
Academic year 2023-24
B.Sc. III Biotechnology Optional
Semester V and VI Course Outcomes (COs)

Semester	Course outcome
Semester V	
Paper IX	DSC 1009 E1- Plant Biotechnology
	1.CO. To gain knowledge regarding basic concepts of plant tissue culture laboratory. 2.CO. To acquire knowledge about how to cultivate plant tissues <i>in vitro</i> 3.CO. To study various types of tissue culture 4.CO. Construct to design the commercial plant tissue culture laboratory
Paper X	DSC 1009 E2 -Animal tissue culture
	1.CO. To understand need of animal tissue culture 2.CO. To learn about the cultivation of animal tissues <i>in vitro</i> 3.CO. To gain knowledge about how to prepare and maintain animal tissues using various media and hormones 4.CO. Construct to design the commercial Animal tissue culture Laboratory
Paper XI	DSC1009 E3 Large-scale manufacturing processes-I
	1.CO. To learn about different designs of fermenters. 2.CO. To study the isolation of industrially important microbial strain production 3. CO. To learn the determination of the end product of fermentation. 4.CO: To students gain knowledge regarding Upstream and Downstream processing at fermentation industries
Paper XII	DSC1009 E4 Large-scale manufacturing processes- II
	1.CO. To understand various types of fermentation 2.CO. To learn about different fermentation product 3.CO. To learn about Intellect Property Rights and patenting 4. CO: After competing for the course students are eligible to work in the production department in the fermentation industry
Semester- VI	
Paper XIII	DSC 1009F1 Advances in Biotechnology I
	1.CO: To acquire knowledge about various advancements in applied biotechnology 2.CO: To acquire and learn about various centrifugation techniques, and protein precipitation. 3.CO: To study the use of chromatographic techniques and tracer technique 4. CO: After completing the course students are eligible to apply

	knowledge of electrophoresis in protein research
Paper XIV	DSC1009 F2 Advances in Biotechnology II
	1.CO: To understand important techniques in gene technology 2.CO: To learn about different therapies in gene technology 3.CO: To learn about applying Biotechnology in silico i.e. via Bioinformatics 4.CO: After completing the course students are eligible to work in molecular diagnostic and Bioinformatics laboratory.
Paper XV	DSC 1009F3 Cell metabolism and virology
	1.CO:To acquire the knowledge regarding biomolecules and their metabolism 2.CO: To learn about various metabolic pathways. 3. CO: To understand the basics of viruses their structure reproduce and cultivation. 4. CO: To study virus cultivation techniques
Paper -XVI	DSC-1009 F4 Environmental Biotechnology
	1.CO: Implementation of green revolution i.e. to attain reduce, reuse & recycle 2.CO :To acquire knowledge and techniques related to wastewater treatment 3.CO: To acquire knowledge to grow healthy crops without chemical pesticides. 4.CO : To study Modern fuels and their applications
SEC V	SEC Sem V- Entrepreneurship development
	CO:1. students get knowledge about business organization CO:2. After completing the course students can incubate their business idea CO:3. Students can understand concepts of business finance CO: 4. students are able to become successful entrepreneurs
SEC VI	SEC Sem VI- Ecology
	CO1:Energy transfer in ecosystem CO2:To understand different industrial indicators of pollution CO3:Able to understand concepts of ecosystem CO4: Able to illustrate bioremediation to abatement of pollution


HEAD
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