

Rajarshi Shahu Mahavidyalaya, (Autonomous) Latur

Department of Microbiology

Teaching Plan

Academic year: 2022-23

Name of the Faculty: Ms. Shruti Shrikant Deshpande

Subject: Microbiology

Class: M.Sc. I (Sem. II)

Course Title: Ecology and Environmental Microbiology

Unit	Unit and the chapter to be covered	No. of Lectures	Date	Academic activities to be organized	Test/Assignments
I	Environment and Ecosystem 1.1 Definitions : Biotic and Abiotic Environment, Microbial Habitat 1.2 Dispersal : Active and Passive 1.3 Communities and Ecosystems, Community Succession, Competition, Adaptations	15	12/01/2023 To 31/01/2023	Seminars	Assignment
II	Waste water and Solid waste treatments 2.1 Need of water management 2.2 Sources of water pollution, Types of solid and liquid waste 2.3 Waste characterization: physical, chemical and biological 2.4 Waste treatments: Primary, Secondary and Tertiary treatments 2.9 Bioaccumulation of heavy metals	15	01/02/2023 To 18/02/2023	Seminars	Assignment
III	Biodeterioration and Biotransformation 3.1 Concept of Biodeterioration 3.2 Biodeterioration of paints, paper and leather	15	20/02/2023 To 10/03/2023	Seminars	Assignment

	3.3 Biochemistry and Microbes involved in recovery of metals				
IV	Ecology and Agricultural Microbiology 4.1 PGPR : Mechanism of Plant growth promotion 4.2 Effect of inoculation with PGPR on the plant soil-microbe ecosystem 4.3 Interactions between PGPR and other microbes	15	11/03/2023 To 31/03/2023	Seminars	Class Test



Subject teacher



HEAD
 HoD
 Dept. of Microbiology
 Rajarshi Shahu Mahavidyalaya
 LAHORE 41-12



Principal