Rajarshi Shahu Mahavidyalaya, (Autonomous) Latur

Department of Microbiology

Teaching Plan

Academic year: 2022-23

Name of the Faculty: Miss Pratiksha Diliprao Mane
Subject: Microbiology
Class: M.Sc. II (Sem. IV)
Course Title: Bioinformatics ,proteomics and genomics (Elective)
Paper No.: XVI
Course Code: P-MIB-454

Details of the Classes to be taught

Sr. No.	Class	Name of teacher	Subject	Paper
1	B.Sc. I	MS. P.D.Mane	Microbiology	Paper : III,U-MIB-254
2	M.Sc. I			Paper: VII, P-ENZ-282
3	M.Sc. II			Paper: XVI, P-MIB-454
				Lab Course: XIV

Unit	Unit and the chapter to be covered	No. of Lectures	Date	Academic activities to be organized	Test/Assignments
II	**Unit-II Biological databases and Multiple sequence alignment** 2.1 Biological databases: PubMed- the central repository for biological database. Metadatabase (Entrez-NCBI). Nucleic acid sequence databank (DDBJ, GenBank and EMBL), Ensembl. Protein databases:	15	04/01/2023 to 27/01/2023	Seminars	Assignment
III	**Unit- III Microbial Genomics** 3.1 Microbial Genome Structure and organization. Principles of microbial	15	28/01/2023 to 24/02/2023	Seminars	Assignment

	genomics such as sequencing, assembly, annotation of microbial genomes and its application to cultured and uncultured microbial community.				
IV	Unit-IV Microbial Proteomics 4.1 Types of proteomics, tools for proteomics- separation and isolation of proteins, methods of studying proteins.	15	25/02/2023 to 01/04/2023	Seminars	Class Test

Note: Five extra lectures are required for the completion of syllabus

Subject Teacher

HEAD
Dept. of Microbiology
Rajarshi S[illegible] Mahavidyalaya
[illegible]

HoD

Principal

Rajarshi Shahu Mahavidyalaya, (Autonomous) Latur

Department of Microbiology

Annual Teaching Plan 2022-23

Name of the Faculty: Miss Pratiksha Diliprao Mane
Subject: Microbiology
Class: B.Sc. I (Sem-III)
Course Title: BASICS OF MICROBIOLOGY AND BIOMOLECULES
Paper No.: III
Course Code: U-MIB-252

Unit	Unit and the chapter to be covered	No. of Lectures	Date	Academic activities to be organized	Test/Assignments
I	UNIT I: Ultra structure of bacterial cell 1.1 Structure, Chemical composition and function of following:- a) Capsule and slimes b) Cell wall and Cytoplasmic membranes c) Flagella and Motility,	10	13/12/2022 to 03/01/2023		Assignment
II	UNIT II: The Viruses: Distribution and structure 10 2.1) Viruses: History 2.2) General characteristics of viruses 2.3) Bacterial, plant and animal viruses	10	04/01/2023 to 25/01/2023		Assignment
III	UNIT III: Biomolecules 3.1Carbohydrates 10 a) Definition and classification b) Triose, Pentose, Hexose (Examples and Structure) 16 c) Disaccharides:- Glycoside linkage (Lactose, Maltose and Sucrose)	10	30/01/2023 to 21/02/2023		Assignment
IV	UNIT IV: Functional and Informational Biomolecules 10 4.1 Proteins: a) Definition and Classification b) Peptide bond: Configurations of proteins	10	22/02/2023 to 03/04/2023		Class Test

Note: Five extra lectures are required for the completion of syllabus

Subject Teacher

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LATUR – 413 512

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