

Subject Code:2SC1000122	Subject Title: Application of Microbiology
Course Type: Subject elective	

Course Objective:

Teaching scheme (hours) per week		Credit			Theory Marks		Practical Marks		Total
Theory	Practical	Theory	Practical	Total	Uni. Assessment	Cont. Assessment	Uni. Assessment	Cont. Assessment	
2	-	2	-	2	35	15	-	-	50

Unit	Content	Lectures	Weight (%)
1	Introduction to Microbiology Taxonomic approach of Microbiology Major group of Microbiology Classification of microbes (three kingdom and five kingdom concept) Application of microbiology in various field • Applications of Microbiology in the field of drinking water • Applications of Microbiology in the field of waste water and waste management • Applications of Microbiology in the field of agriculture.	15	50%
2	• Applications of Microbiology in the field of medicines • Applications of Microbiology in the field of Dairy & Food Industries • Role of microbiology in public health. • Role of microbes in Immunology and medical microbiology. • Role of microbes in Bioleaching, Aeromicrobiology & Exomicrobiology • Role of microbes in Fermentation Industries (Production of Antibiotics, Organic Acids, Enzymes & Other Specialty Biochemicals)	15	50%

Learning Outcome:

By going through the course contents, the student will get educated about the applications of microbiology in different areas of life. Students can also inculcate their further interest in any of these fields depending on their area of interest.

Reference book:

1. Elementary Microbiology Vol.-1 by H.A.Modi
2. Microbiology by M.J.Pelczar, ECS Chan & NR Krieg
3. Principles of Microbiology by R.M. Atlas
4. Microbiology by Presscott, Harley & Klein
5. Textbook of Microbiology by R.C.Dubey & D.K.Maheshwari

