

Yashwantrao Chavan College of Science Karad

Department of Microbiology (B.Sc- III)

Course Outcomes (COs)

COURSE IX DSE - E 49 VIROLOGY

After completion of this course, students will be able

CO 1	To understand the basic concepts of virology
CO 2	To understand the impact of viruses on plants and animals
CO 3	To know the life cycle of viruses and control strategies

COURSE X: DSE - E 50 - IMMUNOLOGY

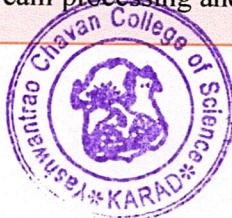
After completion of this course, students will be able to,

CO 1	Learn cells and organs of the immune system
CO 2	Understand the mechanism of immune system and antibody production
CO 3	Understand the concept of hypersensitivity and autoimmunity

**COURSE XI: DSE - E 51 FOOD AND INDUSTRIAL
MICROBIOLOGY**

After completion of this course, students will be able to,

CO 1	Understand role of microorganisms in food preparations and spoilage
CO 2	Learn the scale up of industrial fermented products
CO 3	Learn the downstream processing and product recovery



**COURSE XII: DSE - E 52 – AGRICULTURAL
MICROBIOLOGY**

After completion of this course, students will be able to,

CO 1	Learn the applications of microorganism in agriculture
CO 2	Learn the production and applications of Biofertilizers and biopesticide
CO 3	Understand the mechanism of microbial plant diseases

Course XIII DSE F49: MICROBIAL GENETICS

After completion of this course, students will be able to,

CO 1	Learn the basic concept of microbial genome
CO 2	Learn the concept of gene expression and regulation
CO 3	Understand the applications of genetic engineering in various fields

COURSE XIV DSE F50: MICROBIAL BIOCHEMISTRY

After completion of this course, students will be able to,

CO 1	Understand the basics of enzymes and its role in microbial metabolism
CO 2	Learn the methods for purification of enzymes
CO 3	Learn the impact of various physicochemical parameters on the activity of enzyme

COURSE XV DSE F51: ENVIRONMENTAL MICROBIOLOGY

After completion of this course, students will be able to,

CO 1	Understand the different types and characteristics of waste
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CO 2	Understand the role of microbes in treatment of sewage / waste
CO 3	Understand the basic biological safety in laboratory and environmental monitoring

COURSE XVI DSE F52: MEDICAL MICROBIOLOGY

After completion of this course, students will be able to,

CO 1	Learn the various types of microbial diseases
CO 2	Understand the pathogenesis of microorganisms
CO 3	Understand the mechanism of action of different classes of antimicrobials

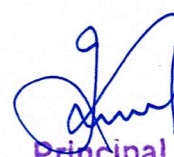
Practical Course I, II III & IV

After completion of this course, students will be able to,

CO 1	Perform isolation and cultivation of viruses
CO 2	Understand the isolation of mutants in the laboratory
CO 3	Learns the bioassay methods for industrial products
CO 4	Perform lab scale fermentation of industrial products
CO 5	Isolate agriculturally important microorganisms
CO 6	Learn the isolation of pathogens from clinical samples



HEAD
DEPARTMENT OF MICROBIOLOGY

Principal
Yashwantrao Chavan College
of Science, Karad.