Department of Microbiology
Course Outcomes

BSc	MICROBIOLOGY (Semester: I)	Credits: 4
MBT: I	INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY	Hrs/Wk: 4

Course outcomes

Up on completion of the course students able to

1. Explain relationship and apply appropriate terminology relating to the structure, Genetics, metabolism and ecology of prokaryotic microorganisms, Algae, viruses and Fungi.
2. Students will get basics and importance of Microbiology.
3. Demonstrate appropriate laboratory skill and techniques related to isolation, staining, identification and control of microorganisms.

BSc	MICROBIOLOGY (Semester: II)	Credits: 4
MBT: II	MICROBIAL PHYSIOLOGY AND BIOCHEMISTRY	Hrs/Wk: 4

Course outcomes

Up on completion of the course students able to

1. This Course provides Understanding of biomolecular synthesis
2. Explain working principle and applications of Colorimetry, Chromatography, Spectrophotometry, Centrifugation and Gel Electrophoresis.
3. Knowledge on Microbial nutrition, bacterial growth, metabolism and Respiration.
4. The student will get first-hand experience on separation methods

BSc	MICROBIOLOGY (Semester: III)	Credits: 4
MBT: III	MOLECULAR BIOLOGY AND MICROBIAL GENETICS	Hrs/Wk: 4

Course outcomes

Up on completion of this course students should able to:

1. Develope Knowledge on microbial genetics and molecular biology and instrumentation.
2. To develop knowledge and skill related to Genetic engineering
3. To be able expertise in cloning techniques

BSc	MICROBIOLOGY (Semester: IV)	Credits: 4
MBT: IV	IMMUNOLOGY AND MEDICAL MICROBIOLOGY	Hrs/Wk: 4

Course outcomes

Up on completion of the course students able to

1. Explain No-specific body defence and the immune response
2. Develop knowledge on disease transmission and control
3. Demonstrate on collection and handling of laboratory specimens
4. Develop an information making personal health decision in regard to infectious diseases.
5. Student can safeguard himself & society and can work diagnostics and hospitals.

BSc	MICROBIOLOGY (Semester: IV)	Credits: 4
MBT: V	MICROBIAL ECOLOGY AND INDUSTRIAL MICROBIOLOGY	Hrs/Wk: 4

Course outcomes

Up on completion of the course students able to

1. Understand fundamental concept in soil microbial diversity, basic concept of biogeochemical cycles and plant growth promotion and plant diseases
2. Understands the role of microorganisms in treatment of solid and liquid waste.
3. Acquire knowledge on application of microorganisms in agro – environmental fields.
4. Get basic information design of fermenter, fermentation processes and Single cell proteins.
5. Self-reliance in the industrial application of Microbiology in life and industry.
6. Entrepreneurship can be established with the gained knowledge.

THIRD YEAR – SEMESTER- V

Paper 5: ENVIRONMENTAL & AGRICULTURAL MICROBIOLOGY

Course Outcomes:

1. The student will have fundamental concepts in soil microbiology, soil microbial diversity, basic concept of nitrogen fixation and plant growth promotion.
2. Understands the role of microorganisms in treatment of solid and liquid waste.
3. The student will acquire knowledge on application of microorganisms in agro – environmental fields.
4. Knowledge on plant disease control.

Paper 6: FOOD AND INDUSTRIAL MICROBIOLOGY

Course Outcomes:

1. The course aim to provide general principles of food microbiology
2. It is assumed that students will have get basic information on spoilage, principle of food preservation and Single cell proteins.

THIRD YEAR – SEMESTER- VI

Elective Paper

MICROBIAL BIOTECHNOLOGY

Course Outcomes:

1. Student should be able to demonstrate with the wide diversity of microbes and their potential for use in microbial biotechnology
2. It is assumed that students will have get outlines of intellectual property rights.

THIRD YEAR – CLUSTER PAPERS :SEMESTER- VI

8A1: MICROBIAL DIAGNOSIS IN HEALTH CLINICS

Course Outcomes:

1. Develop knowledge on disease transmission and control
2. Demonstrate on collection, handling and diagnosis of laboratory specimens
3. Develop a information making personal health decision in regard to infectious diseases.

THIRD YEAR – SEMESTER- VI

8A2: MICROBIAL QUALITY CONTROL IN FOOD AND PHARMACEUTICAL INDUSTRIES

Course Outcomes:

1. Develop knowledge and skills on microbiological laboratory safety- General rules and regulations.
2. Develop skills on disinfection of instruments and equipments in laboratory and Hospitals

THIRD YEAR – SEMISTER-VI

8A3: BIOFERTILIZERS AND BIOPESTICIDES

Course Outcomes:

1. Develop knowledge and skills on mass multiplication and field application of biofertilizers and biopesticides.

Signature of Lecturer In-charge

Principal

PRINCIPAL
A.S.D.GOVT.DEGREE COLLEGE (W)
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