**SEMESTER-III**

**Major:(BOTN3011)Microbiology**

**Course Objective:**

To gain knowledge of diversity, life forms, life cycles, morphology and importance of

microorganisms (Virus & Bacteria) and basic concept of Immunology.

1. Students can identify bacteria studying its cells structure.
2. They can explain Bacterial Cell structure; Bacterial Chromosome & plasmid

Nutritional types, Reproduction and genetic recombination, Endospore, ect.

1. How can we use microorganisms in production of antibiotics to resist diseases?
2. They can distinguish different microbes such as bacteria, virus, mycoplasmas, prions etc.
3. They can utilize bacteria in production of fermented food, Biofertilizer and medicine(Applied microbiology)
4. Application in gene transfer in Bio-technology, and Genetic research.
5. Students can understand the role of different antibiotic, vaccine in disease control.
6. Students can acquire knowledge in basic immunology.

**Major:(BOTN3012) Archegoniate**

**Course Objective:**

This course aims at making a familiarity with special groups of plants joined together by a common

feature of sexual reproduction involving Archegonia. Creating an understanding by observation and

table study of representative members of phylogenetically important groups should be able to make

studentslearntheprocessofevolutioninabroadsense.Studyofmorphology,anatomy,reproduction and

developmental changes therein through typological study should create a knowledge base in

understanding plant diversity, economic values, taxonomy of lower group of plants.

**Course Outcomes:**

The students will be made aware of the group of plants that have given rise to land habit and the

Flowering plants. Through field study they will be able to see the sea plants grown in nature and become familiar with the biodiversity. To my knowledge students should create their small digital reports

where they can capture the zoomed out pictures as well as video sin case, they are able to find

some rare structure or phenomenon related to these plant

**Multi/Interdisciplinarycourse: (BOTN 3031) Plant Biotechnology**

**Course Objective**:The objective of the course is to give students new knowledge on plant

biotechnology processes, including tissue culture. To make students understand about basic

biotechnological processes such as recombinant DNA technology and their applications.

**Learning Outcomes:**The successful students will be able to:Learn the basic concepts, principles

and processes in plant biotechnology.Have the ability of explanation of concepts, principles and

usage of the acquired knowledge in biotechnological applications.

**SkillEnhancementCourse:(BOTN3051)MedicinalBotany**

**CourseObjective**

To impart knowledge on plant chemical resources that may be explore din complementary herbal and

alternative medicine. Also to provide an opportunity to explore uses of plants as medicine based on

traditional indigenous knowledge and their application in modern pharmaceutical industries.

**CourseOutcomes:**

The course will help in skill development related to the contribution of medicinal plants to traditional

and modern medicine. The importance of holistic mode of treatment of the Indian traditional systems of

medicine will be easier. It will also help in developing entrepreneurship skills to establish value

addition products, botanical.