

# SYLLABUS-BOTANY PROGRAMME (B.Sc.-I year)

## COURSE-I: MICROBIOLOGY, MYCOLOGY AND PLANT PATHOLOGY (BSCBO-101)

### UNIT SCHEDULE

#### BLOCK-1-GENERAL MICROBIOLOGY

**Unit-1-**General account, distribution and classification of microorganisms, Major microbes of food, water and soil

**Unit-2-**Isolation and Cultivation of Microorganisms, Instruments used in Microbiological studies

**Unit-3-**Structure, Classification, Nutrition, Reproduction and Economic importance of Bacteria

**Unit-4-**General account, Classification, Structure, Reproduction and Economic importance of Viruses

#### BLOCK-2- FUNGI AND LICHENS

**Unit-5-** Characters, Economic importance, Classification and General account of major classes of Fungi

**Unit-6-** General account, Habit, Structure and Methods of reproduction in Mastigomycotina, Zygomycotina, Ascomycotina

Mastigomycotina- *Phytophthora*, Zygomycotina- *Mucor*, Ascomycotina-*Saccharomyces*, *Erysiphe*

**Unit-7-**General account, Habit, Structure and Methods of Reproduction in Basidiomycotina, Deuteromycotina and Mycoplasma

Basidiomycotina- *Puccinia* and *Agaricus*, Deuteromycotina – *Alternaria*, Mycoplasma- General Account

**Unit-8-** Occurrence, General structure, Nutrition, Reproduction, Economic and Ecological importance of Lichens

#### BLOCK-3- PLANT PATHOLOGY

**Unit-9-**Infection, Disease resistance and General Symptoms

**Unit-10-**Symptoms, Morphology of the causal organism, Diseases cycle and Control measures-I  
Mosaic diseases of tobacco, citrus canker, Wart diseases of potato, Late blight of potato

**Unit-11-**Symptoms, Morphology of the causal organism, Diseases cycle and Control measures-II  
Red rot of sugarcane, Loose smut of wheat, Early blight of Potato.

**Unit-12-**Plant Protection and Control measures of Plant Diseases