T.Y.B.Sc Botany Semester V & VI

Course Outcomes (COs) - Savitribai Phule Pune University

Semester V

BO 351 Algae and Fungi

CO 1: Understand classification and diversity of algae and fungi

CO 2: Explain morphology and life cycles

CO 3: Understand reproduction

CO 4: Identify economic importance

CO 5: Study plant diseases

CO 6: Apply knowledge in agriculture

BO 352 Archegoniate

CO 1: Understand Bryophytes, Pteridophytes and Gymnosperms

CO 2: Study morphology and anatomy

CO 3: Understand reproduction

CO 4: Explain evolution

CO 5: Study economic importance

CO 6: Compare plant groups

BO 354 Plant Ecology

CO 1: Understand ecological principles

CO 2: Study ecosystem

CO 3: Understand population ecology

CO 4: Explain biodiversity

CO 5: Study succession

CO 6: Apply ecological knowledge

BO 355 Cell and Molecular Biology

CO 1: Understand cell structure

CO 2: Study DNA replication

CO 3: Explain transcription

CO 4: Understand translation

CO 5: Study gene regulation

CO 6: Apply molecular techniques

BO 356 Genetics

CO 1: Understand Mendelian genetics

CO 2: Study linkage and mutation

CO 3: Understand population genetics

CO 4: Study molecular genetics

CO 5: Apply genetics

CO 6: Develop analytical skills

BO 357 Practical

CO 1: Identify algae and fungi

CO 2: Study archegoniate

CO 3: Prepare slides

CO 4: Microscopic study

CO 5: Study economic importance

CO 6: Develop lab skills

BO 358 Practical

CO 1: Study ecological tools

CO 2: Field survey

CO 3: Plant community analysis

CO 4: Environmental factors

CO 5: Field work

CO 6: Data analysis

BO 359 Practical

CO 1: Cell biology experiments

CO 2: Chromosome study

CO 3: Genetics experiments

CO 4: Inheritance study

CO 5: Lab skills

CO 6: Data analysis

BO 3510 Medicinal Botany

CO 1: Study medicinal plants

CO 2: Identify plants

CO 3: Study phytochemicals

CO 4: Understand uses

CO 5: Cultivation

CO 6: Application

Semester VI

BO 361 Plant Physiology

CO 1: Understand plant physiological processes

CO 2: Study photosynthesis

CO 3: Study respiration

CO 4: Understand plant growth

CO 5: Study plant hormones

CO 6: Apply physiological concepts

BO 362 Biochemistry

CO 1: Understand biomolecules

CO 2: Study enzymes

CO 3: Understand metabolism

CO 4: Study proteins

CO 5: Understand carbohydrates

CO 6: Apply biochemical knowledge

BO 363 Plant Pathology

CO 1: Understand plant diseases

CO 2: Study pathogens

CO 3: Understand disease cycle

CO 4: Study control measures

CO 5: Identify diseases

CO 6: Apply plant pathology knowledge

BO 364 Evolution and Population Genetics

CO 1: Understand evolution

CO 2: Study population genetics

CO 3: Understand variation

CO 4: Study speciation

CO 5: Understand natural selection

CO 6: Apply evolutionary concepts

BO 365 Advanced Plant Biotechnology

CO 1: Understand biotechnology concepts

CO 2: Study tissue culture

CO 3: Understand genetic engineering

CO 4: Study molecular markers

CO 5: Understand applications

CO 6: Apply biotechnology

BO 366 Plant Breeding and Seed Technology

CO 1: Understand plant breeding

CO 2: Study hybridization

CO 3: Understand seed technology

CO 4: Study seed production

CO 5: Understand seed certification

CO 6: Apply breeding techniques

BO 367 Practical based on 361 & 362

CO 1: Perform physiology experiments

CO 2: Biochemistry experiments

CO 3: Lab techniques

CO 4: Data interpretation

CO 5: Instrument handling

CO 6: Develop lab skills

BO 368 Practical based on 363 & 364

CO 1: Study plant diseases

CO 2: Identify pathogens

CO 3: Perform pathology experiments

CO 4: Study evolution data

CO 5: Lab techniques

CO 6: Develop analytical skills

BO 369 Practical based on 365 & 366

CO 1: Perform biotechnology experiments

CO 2: Plant breeding experiments

CO 3: Seed technology experiments

CO 4: Lab techniques

CO 5: Data analysis

CO 6: Develop experimental skills

BO 3610 Nursery and Gardening Management

CO 1: Understand nursery techniques

CO 2: Plant propagation

CO 3: Garden management

CO 4: Ornamental plants

CO 5: Nursery planning

CO 6: Apply gardening skills