

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati
(Autonomous Status)
(Affiliated to Savitribai Phule Pune University, Pune)

DEPARTMENT OF BOTANY

Course outcome (2022 Pattern)

Class : F. Y. B. Sc. (Semester - I)

Paper Code: USBT 111 Diversity of Cryptogams

Course Outcome:

By the end of the course, students will be able to:

- CO1. Identify, describe and study in detail life cycle of cryptogams.
- CO2. Provide plant description, describe the morphology and reproductive structure of cryptogams.
- CO3. Gain the proficiency in the identification of cryptogams.
- CO4. Knowledge of comparison between cryptogams and other plant groups.
- CO5. Knowledge of scope of the cryptogams diversity.
- CO6. Knowledge about habitat conservation of cryptogams diversity.
- CO7. Knowledge about the applications of cryptogams.

Paper Code : USBT 112 Industrial Botany - I

Course Outcome:

By the end of the course, students will be able to:

- CO1. Understand basics of plant resource based industries.
- CO2. Knowledge about natural and artificial propagation methods.
- CO3. Knowledge about different types of nurseries and its commercial applications.
- CO4. Develop floriculture industries on their own.
- CO5. Develop plant tissue culture industry.
- CO6. Get expertise to develop agro based industries.
- CO7. Get expertise in field of Industrial Botany.

Paper Code : USBT 113 Botany Practical - I

Course Outcome:

By the end of the course, students will be able to:

- CO1. Expertise in handling of microscope.
- CO2. Knowledge of morphological and anatomical variations in cryptogams.
- CO3. Identify the cryptogams.
- CO4. Develop entrepreneurship in agro products.
- CO5. Expertise in artificial plant propagation.
- CO6. Get knowledge of career opportunities in plant based industries.
- CO7. Expertise in the field of Industrial Botany.

Class : F. Y. B. Sc. (Semester - II)

Paper Code : USBT 121 Diversity of Phanerogams

Course Outcome:

By the end of the course, students will be able to:

- CO1. Describe the morphology and reproductive structure of Phanerogams.
- CO2. Identify, describe and study in detail life cycle of Phanerogams.
- CO3. Know scope of the Phanerogams diversity with special reference to Gymnosperms and Angiosperms.
- CO4. Know different methods of conservation of Phanerogams.
- CO5. Study the applications of cryptogams.
- CO6. Describe and identify flowering plants.
- CO7. Understand the local flora with respect to Phanerogams.

Paper Code : USBT 121 Industrial Botany - II

Course Outcome:

By the end of the course, students will be able to:

- CO1. Get knowledge of Biopesticide and Biofertilizer.
- CO2. Acquire knowledge of organic farming with respect to Biopesticides and Biofertilizers.
- CO3. Know scope of the industrially important fungi and their applications.
- CO4. Get knowledge of Pharmaceutical Industry.
- CO5. Know career opportunities in biopesticide and biofertilizer industry.
- CO6. Get expertise in preparation of biopesticides and biofertilizers.
- CO7. Get expertise in the field of Pharmaceutical industry.

Paper Code : USBT 123 Botany Practical - II

Course Outcome:

By the end of the course, students will be able to:

- CO1. Get expertise in handling of microscope.
- CO2. Identify the Phanerogams.
- CO3. Describe flowering plants using botanical terms.
- CO4. Get knowledge of preparation of fungal products.
- CO5. Get knowledge of preparation of bio-fertilizers.
- CO6. Get knowledge of preparation of biopesticides
- CO7. Get knowledge of preparation of pharmaceutical products.

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DEPARTMENT OF BOTANY

Course outcome (2022 Pattern)

Class : S. Y. B. Sc. (Semester - III)

Paper Code: USBT 231 Angiosperms Taxonomy

Course Outcome:

By the end of the course, students will be able to:

- CO1. Describe the morphology and reproductive structure of Phanerogams.
- CO2. Identify, describe and study in detail life cycle of Phanerogams.
- CO3. Know scope of the Phanerogams diversity with special reference to Gymnosperms and Angiosperms.
- CO4. Know different methods of conservation of Phanerogams.
- CO5. Study the applications of cryptogams.
- CO6. Describe and identify flowering plants.
- CO7. Understand the local flora with respect to Phanerogams.

Paper Code: USBT 232 Plant Physiology

Course Outcome:

1. Use knowledge for improvement of agricultural yield
2. Students aware about the plant to response environmental conditions.
3. Students get knowledge of internal activities in plant.
4. Development of expertise in plant physiology.
5. Get knowledge of plant metabolism.
6. Students get knowledge of plant cycle.
7. Students get knowledge of biomolecules.

Paper Code: USBT 233 Practical I

Course Outcome:

By the end of course students will be able to

- CO1. Develop identification skill in cryptogams.
- CO2. Train in cell biology techniques.
- CO3. Understand basic knowledge about life cycle of cryptogams.
- CO4. Internal and external structure of cryptogams.

CO5. Explain basic knowledge about evolution of lower cryptogams.

CO6. Discuss spore dispersal mechanism.

CO7. Understand variations in cryptogamic diversity.

Class : S. Y. B. Sc. (Semester - IV)

Paper Code: USBT 241 Plant Anatomy and Embryology

Learning Outcome:

1. Students get knowledge of internal structure of tissue system in plant.
2. Students are aware about microsporogenesis, megasporogenesis and embryogenesis.
3. Students get knowledge of tissue and tissue systems present in plant.
4. Students get knowledge of secondary growth in plants.
5. Students are able to know reasons for anomalous secondary growth in plants.
6. Students get knowledge of wood anatomy.
7. Students get knowledge of endosperm and seed.

Paper Code: USBT 242 Plant Ecology

Learning Outcome:

1. The student can analyse and interpret the plant relation with the environment and impact of human interventions on ecosystem.
2. Appreciate the ethical, cross-cultural and historical context of environmental issues and the links between human and natural systems.
3. Provide plant description, describe the morphology and reproductive structure of cryptogams.
4. Gain the proficiency in the identification of cryptogams.
5. Knowledge of comparison between cryptogams and other plant groups.
6. Knowledge of scope of the cryptogams diversity.
7. Knowledge about habitat conservation of cryptogams diversity.

Paper Code: USBT 243 Practical II

Course Outcome:

1. Students learned internal morphology of plant.
2. Students get knowledge of developmental changes during microsporogenesis, megasporogenesis and embryogenesis.
3. Students learned ecological adaptations in plant.
4. Students are expertise in sectioning and staining technique.
5. Students should know the practical applications of anatomy, embryology and ecology in recent advances in plant sciences.
6. Get knowledge of preparation of bio-fertilizers.
7. Students should know the practical applications of anatomy, embryology and ecology in recent advances in plant sciences.