

F. Y. B. Sc.(2019-20)CBSC
Plant life & utilization -I (BO-111)
First Term, Semester I
Subject Teacher-Prof-Autade A.R

Topic:-

Introduction

- 1. Algae**
- 2. Fungi**
- 3. Lichens**
- 4. Bryophytes**

Aims and objectives:

Students should know –

- 1) identification, nomenclature
- 2) to know characters of plant groups
- 3) to preserve the diversity of species
- 4) sustainable utilization of species & ecosystem
- 5) to maintain life supporting system and essential ecological process.

Outcomes:-

1. Student understood the diversity of plant on earth is an important resources for food, shelter & agriculture.
2. Student understood about imp & utilization of Algae, Fungi, Bryophytes, Angiosperm.
3. Students understood different type of plant group.
4. Students understood use and application of different types of Algae, Fungi, Bryophytes, Angiosperm



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Principal
B.D.Kale Mahavidyalaya
Ghodegaon, Dist. Pune

F. Y. B. Sc BOTANY
Plant life & utilization -II (BO-121)
Second Term, Semester II.(2019-20)
Subject Teacher –Prof-Autade A.R

Topic:-

- 1. Introduction**
- 2. Pteridophytes**
- 3. Gymnosperm**
- 4. Angiosperm**
- 5. Utilisation of Angiosperm**

Aims and objectives:

Students should know –

1. identification, nomenclature
2. to know characters of plant groups
3. to preserve the diversity of species
4. sustainable utilization of species & ecosystem
5. to maintain life supporting system and essential ecological process.

Outcomes:-

1. Student understood the diversity of plant on earth is an important resources for food, shelter & agriculture.
2. Student understood about imp & utilization of Angiosperm .
3. Students understood different type of plant group.
4. Students understood use and application of different types of Angiosperm



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F. Y. B. Sc.(2019-20)CBSC
Principles of Plant Science (BO-122)
Semester II
Subject Teacher-Prof-Kadam N.J

CREDIT-1: PLANT PHYSIOLOGY AND CELL BIOLOGY

CREDIT-II: MOLECULAR BIOLOGY

OUTCOME-

CO2 Demonstrate processes imbibition, Osmosis, Diffusion and Plasmolysis

CO3 Describe Plant growth regulators and their types.

CO4 Discuss the structure of plant cell and Plasma membrane and cell cycle in plants

CO5 Explain the scope and importance of molecular biology

CO6 Describe the structure of DNA, Packing of DNA and types of DNA, RNA.

CO7 Explain the DNA replication process, enzymes involved in that process.



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F. Y. B. Sc.(2019-20)CBSC
Plant Morphology & Anatomy (BO-112)
First Term, Semester I
Subject Teacher-Prof-Kadam N.J

Topic

1. MORPHOLOGY:

2.MORPHOLOGY OF REPRODUCTIVE PARTS:

3. ANATOMY

4.TYPES OF TISSUES

5. INTERNAL ORGANIZATION OF PRIMARY PLANT BODY:

Course Objectives:

1. To introduce students to the fundamental concepts of plant morphology, focusing on root, stem, leaf, inflorescence, flower, fruit, and seed structures, their modifications, and functions in various plant species.
2. To Explore Plant Organ Modifications: Various modifications in plant organs (roots, stems, leaves, etc.) and understand their adaptive functions in response to environmental conditions, ecological interactions, and plant survival strategies.
3. To develop an understanding of the complex structure of flowers, floral symmetry, and the various types of inflorescences, along with their role in reproduction and pollination strategies
4. To provide students with practical knowledge of the diverse plant structures through lab work and real-life examples, enabling them to identify and categorize plants based on their morphological traits.
5. To encourage critical thinking about plant adaptations to different environments, linking morphology with ecological and evolutionary perspectives.

Course Outcomes:

1. Students will be able to identify, describe, and differentiate between the various types of plant organs (roots, stems, leaves, flowers) and their modifications, based on morphological traits.
2. Students will develop the ability to analyze how specific morphological features of plants such as modified roots, stems, and leaves serve particular ecological functions, enhancing their survival in various habitats.
3. Students will be able to explain the morphology of flowers and inflorescences, including the different types and structures of floral whorls and their roles in the plant's reproductive process.
4. Students will gain a comprehensive understanding of the morphology of fruits and seeds, enabling them to distinguish between different types and understand their role in seed dispersal and plant reproduction.
5. By the end of the course, students will have the skills to examine plant specimens in the field and laboratory, classifying them based on morphological features and demonstrating an understanding of plant function and evolution.



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