

S. Y. B. Sc BOTANY
Plant Anatomy & Embryology (BO-241)
Second Term, Semester IV(2020-21)
Subject Teacher –Prof-Autade A.R

Topic:-

- 1.Introduction.
- 2.Epidermal tissue System.
- 3.Mechanical tissue System
- 4.Normal Secondary Growth
- 5..Anamolous Secondary Growth
- 6.Introduction
- 7.Microsporangium & male gametophyte
- 8.Megasporangium & female gametophyte
- 9.Pollination & fertilization
- 10.Endosperm & Embryo

Aims and objectives:

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

Outcome –

Students should know –

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



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Ghodegaon, Dist.Pune

S. Y. B. Sc (2020-21)

Taxonomy of Angiosperm & plant Ecology (B0-231)

First Term, Semester III

Subject Teacher-Prof-Autade A.R

Topic:-

1. Introduction to Angiosperm Taxonomy.
2. System of classification.
3. Study of plant families.
4. Botanical Nomenclature
5. Introduction to Ecology
6. Ecological grouping of plants

Aims and objectives:

- 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

Outcome –

Students should know –

1. Student understood the diversity of plant on earth is an important resources for food, shelter & agriculture.
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S. Y. B. Sc BOTANY CBSC
Plant Physiology (BO-232)
Semester III (2020-21)
Subject Teacher –Prof-Kadam N.J

Topic:-

- 1. Introduction to Plant Physiology**
- 2. Absorption of water**
- 3. Ascent of sap**
- 4. Transpiration**
- 5. Nitrogen metabolism**
- 6. Seed dormancy and germination**
- 7. Physiology of flowering**

COURSE OUTCOME-

CO1 Define the terminologies: Plant water relations, Growth, Transpiration, Ascent of Sap, Plant growth regulators and Nitrogen metabolism.

CO2: Explain processes of mineral nutrition, absorption of water, ascent of sap, mechanisms of water loss from plants.

CO3: Demonstrate processes imbibition, Osmosis, Diffusion and Plasmolysis, measure growth by arc auxanometer, Bose Cresco graph.

CO4: Describe Plant growth regulators and their types and Discuss nitrogen metabolism in plants CO5: Explain mechanisms and application of photoperiodism, vernalisation and classify the plants based on Photoperiodism.



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S. Y. B. Sc BOTANY CBSC
Plant Biotechnology (BO-242)
Semester IV (2020-21)
Subject Teacher –Prof-Kadam N.J

Topic-

1 Introduction to Plant Biotechnology

2 Plant Tissue Culture

3 Single Cell Protein

4 Plant Genetic Engineering

5 Genomics, Proteomics and Bioinformatics

6 Bioremediation

7 Biofuel technology

COURSE OUTCOME-

CO1 Define the terminologies related to plant biotechnology.

CO2 Describe the fermentation process.

CO3 Explain enzyme technology and their industrial scale production.

CO4 Interpret the production of Single cell proteins.

CO5 Illustrate the concept of phytoremediation.

CO6 Describe General method of gene isolation from the plants and their application.

CO7 Explain Methods of gene, transfer in plants.

CO8 Illustrate Application of plant genetic engineering and Nano-biotechnology in crop improvement.



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