

**DBOT21**

**ASSIGNMENT 1**

**M.Sc. (Final) DEGREE EXAMINATION, JUNE/JULY - 2020**

**(Second Year)**

**BOTANY**

**(Paper - V) : Developmental Biology of Angiosperms and Ethnobotany**

**MAXIMUM MARKS :30**

**ANSWER ALL QUESTIONS**

- Q1)** Incompatibility.
- Q2)** Polyembryony.
- Q3)** Meristems.
- Q4)** Leaf.
- Q5)** Ethnobotany and its scope.
- Q6)** Sacred groves in Guntur district.
- Q7)** Ethnology of Yanadi tribe.
- Q8)** Tribal rights.

**ASSIGNMENT 2**

**M.Sc. (Final) DEGREE EXAMINATION, JUNE/JULY - 2020**

**(Second Year)**

**BOTANY**

**(Paper - V) : Developmental Biology of Angiosperms and Ethnobotany**

**MAXIMUM MARKS :30**

**ANSWER ALL QUESTIONS**

- Q1)** Describe megasporangium.
- Q2)** Describe the structure and development of endosperm.
- Q3)** Describe the anatomy of root-stem transition.
- Q4)** Describe the anomalous secondary growth in dicot stem.
- Q5)** Trace the history of traditional medicine in India.
- Q6)** How do you conserve sacred groves?
- Q7)** How do you evaluate the medicinal plants used by tribals scientifically?
- Q8)** Explain the present status of ethnobotanical research in India.



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**BOTANY**

**(Paper-VI) : Microbiology, Mycology and Plant Diseases**

**MAXIMUM MARKS :30**

**ANSWER ALL QUESTIONS**

**Q1)** Beregey's classification of bacteria.

**Q2)** Phototrophs.

**Q3)** Mycelium.

**Q4)** Mushroom cultivation.

**Q5)** Phytoalexins.

**Q6)** Plant diseases forecasting.

**Q7)** Powdery mildew of Cucurbits.

**Q8)** TMV.

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**(Second Year)**

**BOTANY**

**(Paper-VI) : Microbiology, Mycology and Plant Diseases**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

- Q1)** Explain the role of bacteria in carbon cycle.
- Q2)** Give a general account of viruses. Classify them. Explain their transmission and control.
- Q3)** Give a general account of Myxomycotina.
- Q4)** Describe the economic importance of fungi.
- Q5)** Classify plant diseases and describe symptoms caused by plant pathogens.
- Q6)** Describe the factors affecting the outbreak of plant diseases.
- Q7)** Give an account of diseases in rice caused by various pathogens.
- Q8)** How do you control plant diseases biologically?



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**BOTANY**

**(Paper-VII) : Cell Biology and Molecular Biology**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

- Q1)* Plasma m membrane.
- Q2)* Golgi complex.
- Q3)* Electron microscope.
- Q4)* Signal transduction.
- Q5)* Transformation.
- Q6)* Fine structure of gene.
- Q7)* Gene regulation in prokaryotes.
- Q8)* Genetic code.

**ASSIGNMENT 2**

**M.Sc. (Final) DEGREE EXAMINATION, JUNE/JULY - 2020**

**(Second Year)**

**BOTANY**

**(Paper-VII) : Cell Biology and Molecular Biology**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

- Q1)* Describe the ultra structure of plant cell.
- Q9)* Describe the structure and functions of chloroplast.
- Q10)* Give an account of genetics of cancer.
- Q9)* Write an essay on transposable elements.
- Q9)* How do you prove DNA as genetic material?
- Q9)* Explain the evolution of gene concept.
- Q9)* Describe the DNA replication.
- Q9)* Give an account of DNA repair mechanisms.



**DBOT24**

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**M.Sc. (Final) DEGREE EXAMINATION, JUNE/JULY - 2020**

**(Second Year)**

**BOTANY**

**(Paper-VIII) : Plant Biotechnology**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

- Q1)** Culture media.
- Q2)** Sterilization techniques.
- Q3)** Cybrids.
- Q4)** Somatic hybridization.
- Q5)** c-DNA library.
- Q6)** rDNA molecule.
- Q7)** RELP.
- Q8)** Agrobacterium mediated gene transfer.

**ASSIGNMENT 2**

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**(Second Year)**

**BOTANY**

**(Paper-VIII) : Plant Biotechnology**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

- Q1)* Describe the protocol for the production of haploids through anther culture.
- Q2)* How do you select mutants in vitro for biotic and abiotic stress?
- Q3)* Explain the methods for the production of secondary metabolites through tissue culture.
- Q4)* Write an essay on protoplast fusion and somatic hybridization.
- Q5)* Describe gene cloning vectors.
- Q6)* Describe the amplification of DNA by polymerase chain reaction.
- Q7)* Explain the role of biotechnology in agriculture.
- Q8)* Give an account of direct gene transfer methods.

