**DBOT01**

**ASSIGNMENT 1**

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

**(First Year)**

**BOTANY**

**Paper-I: Biology and Diversity of Algae, Bryophytes, Pteridophytes and Gymnosperms**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Classification of Cyanophyta

***Q2)*** Fossil Algae

***Q3)*** Elaters

***Q4)*** Gemmae Cups

***Q5)*** Psilotom

***Q6)*** Stele in Lycopsida

***Q7)*** Wood in Gnetum

***Q8)*** Distribution of Gymnosperms

**ASSIGNMENT 2**

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

**(First Year)**

**BOTANY**

**Paper-I: Biology and Diversity of Algae, Bryophytes, Pteridophytes and Gymnosperms**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Describe the structure, reproduction and life cycle patterns of chlorophyta.

***Q2)*** Describe the economic importance of algae.

***Q3)*** Give an account of thallus organization, reproduction and evolutionary trends in hepaticopsida.

***Q4)*** Give an account of thallus organization, reproduction and evolutionary trends in bryopsida.

***Q5)*** Describe the structure and reproduction in Sphaenopsida.

***Q6)*** Describe the structure and reproduction in Pteropsida.

***Q7)*** Describe the reproduction and evolutionary tendencies in Bennettitales.

***Q8)*** Classify Gymnosperms.

**DBOT02**

**ASSIGNMENT 1**

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

**(First Year)**

**BOTANY**

**Paper-II: Systematics of Angiosperms and Plant Ecology**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Herbalists

***Q2)*** Primitive flower in Engler and Prantl system of classification

***Q3)*** Infraspecific category

***Q4)*** Alkaloids

***Q5)*** Energy flow

***Q6)*** Homeostasis

***Q7)*** Alternate energy sources

***Q8)*** Continental drift

**ASSIGNMENT 2**

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

**(First Year)**

**BOTANY**

**Paper-II: Systematics of Angiosperms and Plant Ecology**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Describe the present vegetation types and distribution.

***Q2)*** Give a brief account of post-Darwinian systems of classifications.

***Q3)*** Enumerate the salient features of plant nomenclature.

***Q4)*** Explain the role of cytology in resolving taxonomic disputes.

***Q5)*** Give an account of biogeochemical cycle with reference to nitrogen.

***Q6)*** Write an essay on plant succession.

***Q7)*** Explain the methods for the conservation of natural resources.

***Q8)*** Describe the principles of plant geography.

**DBOT03**

**ASSIGNMENT 1**

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

**(First Year)**

**BOTANY**

**Paper-III: Cytology, Genetics and Plant Breeding**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Prokaryotic Cell

***Q2)*** Nucleolus

***Q3)*** Inversions

***Q4)*** Autopolyploids

***Q5)*** Tetrad Analysis

***Q6)*** Cytoplasmic Inheritance

***Q7)*** Plant Introduction

***Q8)*** Clonal Selection

**DBOT03**

**ASSIGNMENT 2**

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

**(First Year)**

**BOTANY**

**Paper-III: Cytology, Genetics and Plant Breeding**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Give an account of cell cycle in eukaryotes.

***Q2)*** Write an essay on karyotype evolution.

***Q3)*** Describe the numerical alterations in chromosomes.

***Q4)*** Describe the evolution of major crop plants.

***Q5)*** Explain the salient features of chi-square test for goodness of fit.

***Q6)*** Explain the role of mutations in plant breeding.

***Q7)*** Describe the breeding methods in self pollinated crops.

***Q8)*** Describe the breeding methods in cross pollinated crops.

**DBOT04**

**ASSIGNMENT 1**

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

**(First Year)**

**BOTANY**

**Paper-IV: Plant Physiology and Metabolism**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Membrane Transport Proteins.

***Q2)*** Cohesion Theory.

***Q3)*** Km Value.

***Q4)*** ATP Synthesis.

***Q5)*** Glyoxalate Cycle.

***Q6)*** Mechanism of Nitrogen Fixation.

***Q7)*** Signal transduction.

***Q8)*** HR and SAR processes.

**DBOT04**

**ASSIGNMENT 2**

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

**(First Year)**

**BOTANY**

**Paper-IV: Plant Physiology and Metabolism**

MAXIMUM MARKS :30

ANSWER ALL QUESTIONS

***Q1)*** Describe translocation of water.

***Q2)*** Explain the role of macro and micro nutrients.

***Q3)*** Describe the mechanism of electron and proton transport.

***Q4)*** Write an essay on glycolysis.

***Q5)*** Give the classification of proteins and their synthesis.

***Q6)*** Describe the structure and functions of storage and membrane lipids.

***Q7)*** Write an essay on photoperiodism and role of vernalisation.

***Q8)*** Describe the physiological effects and mechanism of auxins and gibberellins.