(DBOT01)

ASSIGNMENT-1 M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019 (First Year) BOTANY Biology and Diversity of Algae, Bryophytes, Pteridophytes and Gymnosperms

Maximum : 30 MARKS

Answer ALL Questions

- *Q1)* Ecology of Charophyta.
- *Q2)* Evolution in Algae.
- *Q3)* Alternation of generations.
- *Q4)* Elaters and pseudoelaters.
- *Q5)* Gametophyte of Lycopodium.
- *Q6)* Rhizophore and sporocarp.

(DBOT01)

ASSIGNMENT-2

M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019 (First Year) BOTANY

Biology and Diversity of Algae, Bryophytes, Pteridophytes and Gymnosperms Maximum : 30 MARKS Answer ALL Questions

- *Q1*) RLS and TLS.
- **Q2)** Classification of Gymnosperms.
- Q3) a) Describe the reproduction and life cycles in Chlorophyta.
 - b) Compare and contrast the reproduction in Charophyta and Rhodophyta.
- **Q4)** a) Describe the thallus organization in Bryophytes.
 - b) Compare and contrast the reproduction in Anthocerotopsida and Hepaticopsida.
- Q5) a) Distinguish between homospory and heterospory and give example for each.
 - b) Give an account of fossil Pteridophytes studied by you.
- Q6) a) Describe the reproduction and evolutionary trends in Coniferales.
 - b) Give an account of Caytoniales.



(DBOT02)

ASSIGNMENT-1 M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019 First Year BOTANY Systematics of Angiosperms and Plant Ecology Maximum : 30 MARKS Answer ALL Questions

- Q1) Herbalists.
- *Q2*) De Candolle.
- Q3) Minor categories.
- Q4) Valid publication.
- Q5) Plant succession.
- *Q6)* Regulation of populations.

(DBOT02)

ASSIGNMENT-2 M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019 First Year BOTANY Systematics of Angiosperms and Plant Ecology Maximum : 30 MARKS

Answer ALL Questions

- *Q1)* Floristic regions of the world.
- Q2) Control of environmental pollution.
- *Q93*) a) Give an account of any post-Darwinian system of classification studied by you.
 - b) Compare the present and past plant distributions.
- Q4) a) Explain the role of cytology in resolving taxonomic disputes.
 - b) What are the contributions of geography to taxonomy?
- **Q5)** a) Give an account of food chains and energy flow.
 - b) Describe the biogeochemical cycles with reference to Sulphur and Phosphorus.
- *Q6*) a) How do you conserve natural resources?
 - b) Describe the evolution of present day vegetation.



(DBOT03)

ASSIGNMENT-1 M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019 (First Year) BOTANY Cytology, Genetics and Plant Breeding Maximum : 30 MARKS Answer ALL Questions

- *Q1)* Synaptonemal complex.
- Q2) Packaging of DNA.
- Q3) Translocations.
- Q4) Haploids.
- **Q5)** Modified dihybrid ratios.
- Q6) Probability.
- *Q7*) Plant introduction.

(DBOT03)

ASSIGNMENT-2 M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019 (First Year) BOTANY Cytology, Genetics and Plant Breeding Maximum : 30 MARKS Answer ALL Questions

Q1) Multiple crossing.

- **Q2)** a) Distinguish between euchromatin and heterochromatin.
 - b) Describe the karyotype evolution.
- Q3) a) Give an account of special types of chromosomes.
 - b) Write an essay on autopolyploids.
- Q4) a) Describe Chi-square test an its applications.OR b) Explain the role of mutations in plant breeding.
- Q)5 a) Describe the breeding methods in self pollinated crops.
 - b) Describe the breeding methods in cross pollinated crops.



(DBOT04)

ASSIGNMENT-1 M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019 First Year BOTANY Plant Physiology and Metabolism Maximum : 30 MARKS Answer ALL Questions

- *Q1)* Energy dependent hypothesis.
- Q2) Role of micro nutrients.
- *Q3)* Light harvesting complexes.
- *Q4)* C3 cycle.
- Q5) Transamination.
- *Q6)* Glyoxalate cycle.

(**DBOT04**)

ASSIGNMENT-2

M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER - 2019

First Year

BOTANY

Plant Physiology and Metabolism

Maximum : 30 MARKS

Answer ALL Questions

- **Q1)** Heat shock proteins.
- Q2) Photoperiodism.
- *Q3)* a) Describe the water transport through xylem.
 - b) Give an account of physical and chemical properties of water.
- Q4) a) Write an essay on enzyme nomenclature and classification.
 - b) Describe photorespiration and its significance.
- *Q5)* a) Describe nitrogen fixation by living and symbiotic microorganisms.b) Describe glyoxalate cycle.
- Q6) a) Describe the physiological effects and mechanism of action of auxins.
 - b) Describe the plant responses to water stress.

