(DBOT01)

M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER – 2015

(First Year)

BOTANY

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

Time : 3 Hours **Maximum Marks: 70**

SECTION-A *(5 × 6 = 30)*

Answer any five of the following

1) Charophyta

2) Fragmentation

3) Bacillariophyta

4) Thallus range in Bryophyts

5) Evolutionary trends in Hepaticopsida

6) Classification of pteridophytes

7) Fossil Gymnosperms

8) Cycadales

SECTION-B *(4 × 10 = 40)*

Answer all the questions

9) a) Describe reproductive patterns in xanthophyta.

OR

b) Write the life cycle in phaeophyta.

10) a) Describe the reproduction in Anthocerotopsida.

OR

b) Explain the Reproduction in Hepaticopsida.

11) a) Describe the fossil pteridophytes.

OR

b) Describe the reproduction patterns in pteropsida.

12) a) Write the general characters of coniferales.

OR

b) Explain Economic importance of Gymnosperms

EEE

(DBOT02)

M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER – 2015

(First Year)

BOTANY

Paper – II : Systematics of Angiosperms and Plant Ecology

Time : 3 Hours **Maximum Marks: 70**

SECTION-A *(5 × 6 = 30)*

Answer Any five of the following

1) Mesophytes

2) Dicots

3) Phytochemistry

4) Food chains

5) Nitrogen cycle

6) Succession

7) Floristic regions of in India

8) Alterate and additional energy sources

SECTION-B *(4 × 10 = 40)*

Answer all of the following

9) a) Write the vegetation types and distribution in the present.

OR

b) Write the account of pre-Darwinian systems of classifications.

10) a) Principles of plant taxonomy and nomenclature.

OR

b) Give an account of anatomy and cytology to taxonomy.

11) a) Discuss the energy flow and homeostasis.

OR

b) Discuss the types of succesion in plant communities.

12) a) Discuss the environmental pollution – causes and control.

OR

b) Write the account an edemism and continental drift.

EEE

(DBOT03)

M.Sc. (Previous) DEGREE EXAMINATION, DECEMBER – 2015

(First Year)

BOTANY

Paper – III : Cytology, Genetics and Plant Breeding

Time : 3 Hours **Maximum Marks: 70**

SECTION-A *(5 × 6 = 30)*

Answer any five of the following

1) Banding patterns

2) Telomere

3) Deficiency and inversion

4) Aneuploids

5) Interation of genes

6) Probability - laws

7) Pure line selection

8) Recurrent

SECTION-B *(4 × 10 = 40)*

Answer all of the following

9) a) Write the account on chromosome structure and packing of DNA.

OR

b) Describe the Euchromation and Heterochromatin.

10) a) Describe origin, occurrence production and meiosis of haploids.

OR

b) Describe the auto and allopolyploids.

11) a) Write the account on sex determination mechanisms in plants and man.

OR

b) Describe the sex-limited inheritance.

12) a) Explain the plant introduction and pedigree methods.

OR

b) Give an account on Bulk and Back cross methods.

EEE

(DBOT04)

M.Sc.(Previous).DEGREE EXAMINATION, DECEMBER – 2015

First Year

BOTANY

Paper - IV : Plant Physiology And Metabolism

Time : 3 Hours **Maximum Marks: 70**

SECTION-A

Answer any Five of the following **(5 × 6 =30)**

1) Bulk flow.

2) Components of water potential.

3) Chloroplast.

4) CAM pathway.

5) Symbiotic microorganisms.

6) Soil nitrogen sources.

7) ABA.

8) Heat shock proteins.

SECTION-B

Answer all of the following **(4×10=40)**

9) a) Explain the Osmosis and water potential?

OR

b) Describe facilitated diffusion and active processes of Inorganic nutrition?

10) a) Describe the mechanisms of electron and proton transport?

OR

b) Explain the pentose phosphate pathway?

11) a) Describe the protein classifications?

OR

b) Give an account on β-oxydation and glyoxylate cycle.

12) a) Give an account on ABA and Ethylene effects and mechanism of actions?

OR

b) Describe the photoperiodism and vernalisation?

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