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PG2S-037-B-22

M.Sc. II Semester Degree Examination

BOTANY

Ecology and Environmental Biology

Paper - BOT HCT 2.1

Time : 3 Hours Maximum Marks : 80

Instructions to Candidates.

1. Answer any FIVE Questions.
2. Question NO. 1 is compulsory.

Answer in one or two sentences. (10×2=20)

1 a. Trophic level.

b Ecotype.

c Toxicity.

d Biodegradation.

e. Ecological Pyramid.

f. Ecads

g. Lithosphere.

h. Remote Sensing.

i. Food web.

j. Allelopathy.

2 Define primary productivity and explain the method of measuring primary productivity.(15)

3. Give an account of a sequential stages of a typical hydrosere. (15)

4. Briefly give an account of various types of water pollution and suggest method of control.(15)

5. Explain Environmental protection act 1986 (15)

6. **Answer any three of the following.** **(3×5=15)**

a. Nitrogen cycle.

b. Climatic climax.

c. Ozone depletion.

d. Biodegradation of pollutants.

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PG2S-040-B-22

M.Sc. II Semester Degree Examination

BOTANY

Biofertilizers and Biopesticides

Paper - OET 2.4.1

Time : 3 Hours **Maximum Marks : 80**

Instructions to Candidates.

1. Answer any **five** Questions.
2. Question no. **1** is compulsory.

Answer in one or two sentences. **(10×2=20)**

1. a. Azospirillum.

b. Gloeocapsa.

c. Nostoc.

d. Bioinsecticides.

e. Nitrogenase.

f. Marigold.

g. Mycorrhizae.

h. Pyrethroids.

i. Frankia.

j. Wet sieving.

2 Give an account of bacterial fertilizers and their role in agriculture **(15)**

3. Give a detailed general account and applications of mycorrhizae. **(15)**

4. Write an account of advantages of Biopesticide over chemical pesticides. **(15)**

5. Write general account on applications of Lyngbya plectonema and Tolypothrix as biofertilizers. **(15)**

6. Write a short notes on any **three** of the following. (3×5=15)

a. Mass production of azotobacter.

b. Symbiotic association of cyanobacteria.

c. Bacteria as Insecticides.

d. Trichoderma as biofertilizer.

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M.Sc. II Semester Degree Examination

BOTANY

Plant Anatomy and Embryology

Paper - BOT HCT 2.2

Time : 3 Hours **Maximum Marks : 80**

Instructions to Candidates.

1. Answer any **five** Questions.
2. Question no **1** is compulsory.

1 Answer in One or Two sentences. **(10×2=20)**

a. Phylogeony.

b Histogen theory.

c Tracheids.

d Subsidiary cells.

e. Middle Lamella.

f. Endothecium.

g. Callose.

h. Filiform apparatus.

i. Apomixis.

j. p. Maheshwari.

2 Write an account on the ontogeny, phylogeny and ultrastructure of xylem **(15)**

3. Describe the anomalous primary and secondary growth in Achyranthes and tinospora. **(15)**

4. Write a detailed account on the structure histochemical details of style and stigma **(15)**

5. Describe the development of Dicot embryo with labelled diagrams. **(15)**

6. Answer any **Three** of the following. **(3×5=15)**

a. Chemistry of cell wall

b. Types of trichomes.

c. Nutrition of the Embryo Sac.

d. Intra ovarian pollination.

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PG2S-039-B-22

M.Sc. II Semester Degree Examination

BOTANY

Medicinal and Aromatic Plants

Paper :BOT SCT 2.3.1

(New)

Time : 3 Hours **Maximum Marks : 80**

Instructions to Candidates:

1. *Answers any Five questions*
2. *Q.No. 1 is compulsory.*

Answer in one or Two sentences. **(10×2=20)**

1. a) Ethnomedicine
   b) Tibetan system of medicine
   c) General tonic
   d) Diabetic
   e) *Withania somnifera*
   f) *Aloe vera*
   g) Pest control
   h) Lectins
   i) IPR
   j) Phytochemistry
2. Write an account on the History and importance of ethno-botany in modern health care system. **(1×15=15)**
3. Write a brief account on the methods of preparation and their use in the treatment of cancer and nervous disorders. **(1×15=15)**
4. Describe the cultivation methods of any five medicinal and aromatic plants you have studied. **(1×15=15)**
5. Explain raw drug analysis, add a note on preliminary phyto-chemical analysis of one medicinal plant and one aromatic plant. **(1×15=15)**

6. Answer any **Three** of the following. **(3×5=15)**

a) Basic concepts and development of traditional system of medicine.

b) Medicinal food plants.

c) Harvesting and storage of crude druges.

d) Controversial drugs.
