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PG2S-280-B-23

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:

Answer any Five questions. Q.1. is compulsory.

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

1. a) Ecosystem components
b) Types of Biogeochemical cycle
c) Ecotypes
d) Allelopathy
e) Lithosphere
f) Soil formation
g) CFC's
h) Acid rain
i) GIS
j) Biodegradation.

2. Write an account on diversity and characteres of terrestrial ecosystem. **(15)**

3. Give an account on different water bodies. Add a note on the importance of rain water harvesting. **(15)**

4. Give an account of causes, effects and control measures of air pollution. **(15)**

5. Write an essay on environmental protection and conservation. **(15)**

6. **Answer any Three of the following.** **(15)**
a) Ecology flow in ecosystem
b) Climatic climax
c) Green house effect
d) Remote sensing

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PG2S-281-B-23

M.Sc. II Semester Degree Examination

BOTANY

(CBCS Scheme)

Plant Anatomy and Embryology

Paper - BOT: HCT 2.2

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

Note: ***Answer any FIVE questions. Question No.1 is compulsory.***

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

i) Suberin

ii) Soft wood

iii) Companion cell

iv) Intrerfascicular cambium

v) Trichome

vi) Amoeboid tapetum

vii) Obturator

viii) Hollow style.

ix) Somatic embryo

x) PEN

2. Explain the ultrastructure and chemistry of cell wall **(15)**

3. Describe anomalous primary and secondary growth in *Nyctanthus* **(15)**

4. Describe the development of monosporic type of embryo sac **(15)**

5. Explain the structure and development of nuclear and cellular endosperm **(15)**

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

a) Theories of organization of Shoot apical meristem

b) Types of stomata and their significance

c) Pollen structure and sporopollenin

d) Polyembryony.
