

Bachelor of Science (B.Sc.) Fifth Semester  
**B.Sc. 3508 - Botany Paper-II (Plant Ecology)**

P. Pages : 2

Time : Three Hours



**GUG/W/18/1329**

Max. Marks : 50

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Illustrate your answers with suitable examples and draw well labelled diagrams wherever necessary.

1. Explain physical properties of soil. Add a note on soil profile. 10

**OR**

a) Nitrogen Cycle. 5

b) Effects of water pollution on plants. 5

2. What is autecology? Write about importance of autecology. Add a note on ecotype. 10

**OR**

a) Anatomical Adaptations of Hydrophytes. 5

b) Factors affecting distribution of species. 5

3. Write short note on-

a) Branches of ecology. 2½

b) Ecological pyramids. 2½

c) Ecad. 2½

d) Causes of Succession. 2½

**OR**

e) Effects of light on plants. 2½

f) Interaction between plants and microorganisms. 2½

g) Life forms. 2½

h) Halophytes. 2½

4. Write short notes on-
- a) Interaction between plants and animals. 2½
  - b) Energy flow. 2½
  - c) Quantitative analysis of plant community (any two methods) 2½
  - d) Alpine zone. 2½

**OR**

- e) Gaseous composition of atmosphere. 2½
  - f) Air pollution (control). 2½
  - g) interactions among population. 2½
  - h) Climax Concept. 2½
5. Write answers for **any ten** is two or three lines only (Diagrams not necessary). **10**
- a) Weathering.
  - b) Mesotherms.
  - c) Amensalism.
  - d) Decomposers.
  - e) Aerosols.
  - f) Food chain.
  - g) Ecotone.
  - h) Sigmoid curve.
  - i) Neutralism.
  - j) Plant Succession.
  - k) Aerenchyma.
  - l) Phytogeography.

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