

B.Sc. (Part-I) (CBCS Pattern) Semester-I  
**USENVT02 - Environmental Science Paper-II - Ecology**

P. Pages : 1

Time : Three Hours



**GUG/S/25/11551**

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate the answers with suitable diagrams and examples.

1. Describe abiotic factors of the environment. 10  
**OR**  
a) Discuss positive interaction with suitable examples. 5  
b) What do you mean by Shelford's law of Tolerance. 5
2. Define community. Discuss its characteristics. 10  
**OR**  
a) Describe types of ecological succession. 5  
b) Describe the terms edge effect and ecological niche. 5
3. State types of ecosystems. Describe forest as an ecosystem. 10  
**OR**  
a) Give fundamental aspects of productivity. 5  
b) Write a short note on Nitrogen cycle. 5
4. Discuss adaptations in plants. 10  
**OR**  
a) State importance of coloration with example. 5  
b) Describe Batesian and Mullerian mimicry. 5
5. Answer in brief (**any ten**). 10  
a) Define ecology.  
b) What do you mean by Mutualism?  
c) Describe biotic factors of environment in short.  
d) Define population ecology.  
e) What do you mean by Key stone species?  
f) What is Xerosere?  
g) Give difference between primary and secondary productivity.  
h) How biogeochemical cycles are classified?  
i) How do you measure productivity?  
j) Give example of adaptation in desert animals.  
k) How coloration is used for warning and signaling?  
l) Define bio-mimicry.

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