

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

P. Pages : 1

Time : Three Hours



**GUG/W/22/11551**

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. Discuss in detail abiotic factors w.r.t. temperature. 10  
**OR**  
a) Explain in brief negative interactions among organisms. 5  
b) Classify modern branches of ecology. 5
2. Describe the process of ecological succession. What are the different types of ecological succession? 10  
**OR**  
a) Explain species diversity and dominance as characteristics of community ecology. 5  
b) With a neat sketch explain growth curve of population. 5
3. What are the ecological pyramids? Explain pyramids of number and biomass. 10  
**OR**  
a) Explain in detail grassland ecosystem. 5  
b) Discuss primary and secondary productivity. 5
4. Discuss adaptation in aquatic animals. 10  
**OR**  
a) Elaborate the terms : protective mimicry and evolution of mimicry. 5  
b) Describe biological significance of colour in animals. 5
5. Answer in brief **any ten**. 1x10  
a) What is commensalism? =10  
b) Define ecology.  
c) State the Shelford's law of tolerance.  
d) Define natality of population.  
e) Give the examples of major community.  
f) What is migration of population?  
g) What is primary productivity?  
h) What is biogeochemical cycle?  
i) Define ecosystem.  
j) What is colouration?  
k) What is biomimicry?  
l) Write any two causes of colouration.

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