

AS/2051

May 2021

709/MH

B.Sc SEMESTER-II PAPER-III: ECOLOGY

Theory-40  
hours

Time Allowed: 3 hrs

**INSTRUCTIONS FOR CANDIDATES**

Candidates are required to attempt two questions from each section A and B and the entire section C, which is compulsory.

**SECTION-A**

1. Describe the effect of environmental factors on animals - Topography, light, temperature, water, Humidity. 6
2. A. Discuss population Characteristics - Size & density. 3  
B. Concept of limiting factors 3
3. Write short notes on the following:  
A. Biotic potential 3  
B. Environment resistance 3
4. A. Discuss population cycles - Density dependent and Density independent. 4  
B. What are Survivorship curves 2

**SECTION-B**

5. Write short notes on the following:  
A. Food chain  
B. Niche Concept 3,3
6. A. What is Lotka-Volterra equation for competition. 3  
B. conservation strategies 3
7. Explain Intra specific interactions and Inter specific interactions. 6
8. Discuss (A) Gir lion sanctuary project (B) vulture breeding project. 3,3

**SECTION-C**

Write short notes on the following:

1. Liebig's law of minimum
2. r and K strategies
3. Environment resistance
4. Niche Concept
5. project tiger
6. Ammensalism
7. Gause's Principle
8. Flow of Energy

8X2