

U.G. 1st Semester Examination - 2021**ZOOLOGY****Course Code : BZOCCCHC 102****Course Title : Perspectives in Ecology**

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **ten** of the following: $1 \times 10 = 10$
- Define population.
 - Who coined the term 'ecology'?
 - What is the importance of decomposers in the ecosystem?
 - Define autecology.
 - What is carrying capacity?
 - Animal that can tolerate very large variations in salinity are called _____.
 - What is β -diversity?
 - Why is species richness important?

- Who gave the Competitive Exclusion Principle?
- What is 'Life table'?
- What is food web?
- Define umbrella species.
- Write any two density-dependent factors in Population regulation.
- What do you mean by Ramsar site?
- What is fecundity table?

2. Answer any **five** from the following: $2 \times 5 = 10$
- What are the objectives of *in-situ* conservation?
 - Distinguish between habitat and niche.
 - What is 'r' strategy?
 - Difference between Natality and Mortality.
 - Name one National park and one Sanctuary in West Bengal.
 - Why has nature evolved food web in ecosystem instead of simple linear food chains?
 - Why is 'Lotka-Volterra' equation for competition important?

h) Distinguish between diversity and abundance.

3. Answer any **two** from the following: $5 \times 2 = 10$

a) What is biosphere? Describe the component of biosphere. Comment on how the biosphere is being affected by the activities of human.

$1 + 1 + 3 = 5$

b) What are the different vertical stratification in forest? What are the importances of vertical stratification in plant and animal communities in forest?

$3 + 2 = 5$

c) What is ecological succession? What is a climax community? Explain the process of ecological succession with suitable diagram.

$1 + 1 + 3 = 5$
