

B.Sc. 1st Semester (Hons.) Examination, 2021 (CBCS)

Subject: Zoology

Paper: CC-2 (Ecology)

Full Marks: 40

Time: 2 Hrs

Candidates are required to give the answers in their own words as far as practicable.

Answer any **eight** questions of the following:

5×8 = 40

1. When a species can be called as a dominant species in a community? How does it differ from the keystone species?
 2. Give a schematic representation of the soil nitrogen cycle with notes on the role of microorganisms in it.
 3. Draw differences between unitary and modular populations. State the importance of life table in population biology.
 4. Explain Shelford's law of tolerance with suitable example. Write down the role of temperature as a limiting factor.
 5. Briefly describe the box and pipe models for energy flow with suitable diagrams.
 6. Elucidate briefly primary and secondary successions with examples.
 7. Define wildlife. What are the causes of wildlife depletion?
 8. Give an account of the three major types of survivorship curves with examples.
 9. Briefly describe edge effect and its importance in ecosystem sustenance.
 10. Explain carrying capacity of a population with a diagram.
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