



'समाजो मन्त्रः समितिः समाजी'

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 1st Semester Examination, 2022

CC2-ZOOLOGY

ECOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Answer any **five** questions from the following: $1 \times 5 = 5$
 - (a) What is 'cohort'?
 - (b) What are eurythermal organisms?
 - (c) What is autecology?
 - (d) The area over which an animal moves in search of food is called _____.
(Fill in)
 - (e) What is fecundity?
 - (f) _____ percent of energy is lost in transferring food energy from one trophic level to another.
(Fill in)
 - (g) Name the world's oldest national park.
 - (h) What is hypervolume niche?

2. Answer any **three** questions from the following: $5 \times 3 = 15$
 - (a) Write a short note on ecotone and edge effect.
 - (b) Write a note on impact of light on animals.
 - (c) Define natality. Distinguish between physiological natality and realized natality. 2+3
 - (d) What is the importance of nitrogen to organisms? What is denitrification? 3+2
 - (e) Write differences between 'r-selection' and 'k-selection'.

3. Answer any **two** from the following: $10 \times 2 = 20$
 - (a) Define competition. Write a brief note on intraspecific competition with suitable examples. Elucidate Gause's principle with suitable field examples. 2+4+4
 - (b) Describe three general types of survivorship curves with examples. Write a short note on means of dispersal. Add a note on the effect of dispersal on population. 4+4+2
 - (c) What is succession? Distinguish primary and secondary succession. Describe monoclimax and polyclimax theory. 2+4+4
 - (d) Differentiate in-situ and ex-situ conservations. Give an account of strategies followed in in-situ conservation. Add a note on 'Wildlife Protection Act (1972)'. What is 'Flagship species'? 2+4+3+1

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