



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 1st Semester Examination, 2020, held in 2021

ZOOACOR02T-ZOOLOGY (CC2)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer any **eight** questions from the following: 2×8 = 16
- (a) What is survivorship curve?
 - (b) What do you mean by exponential growth?
 - (c) Compare between habitat and niches.
 - (d) What is carrying capacity?
 - (e) What do you mean by population dispersal?
 - (f) Differentiate between *r* and *k* selection strategies.
 - (g) Explain Gause's competitive exclusion principle.
 - (h) What is ecological efficiency?
 - (i) Name a (0/+) and a (+/+) biotic interactions.
 - (j) What do you mean by reverse ecological pyramids?
 - (k) What is endangered species? Give example from Indian birds.
 - (l) What do you mean by species richness?
2. Answer any **three** questions from the following: 3×3 = 9
- (a) State the monoclimax and polyclimax theory. 3
 - (b) Differentiate between grazing and detritus based food chain. 3
 - (c) Distinguish between Aut-ecology and Syn-ecology. 3
 - (d) Compare between national park, sanctuary and biosphere reserve. 3
 - (e) Define life table. State different parameters of a dynamic life table. 1+2
3. Answer any **three** questions from the following: 5×3 = 15
- (a) Define logistic growth model. Describe different phases of a logistic growth curve with proper diagram. 1+4
 - (b) What are density dependent factors? How do they regulate population? 2+3
 - (c) How many biosphere reserves are found in India? State their names and distribution. Why is Sunderban considered as biosphere reserve? 1+2+2

- (d) Explain the Y-shaped energy flow model with proper diagram. 5
- (e) What is Eltonian pyramid? Describe the different types of Eltonian pyramid with suitable diagram. 1+4
- (f) Write briefly about the “Wildlife Protection Act, 1972”. 5

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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