



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 4th Semester Examination, 2022



BOTACOR09T-BOTANY (CC9)

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 the following questions: 1×6 = 6
- (a) What do you mean by ecotone?
 - (b) What is an edge effect?
 - (c) Mention two important plants of Eastern Himalayas.
 - (d) Define biotic factors.
 - (e) Name the first trophic level and last trophic level of ecosystem.
 - (f) Name two producers of Tundra biome.
2. Answer any **eight** questions from the following: 3×8 = 24
- (a) Distinguish between niche and habitat. 3
 - (b) Remark on the concept of ecological amplitude. 3
 - (c) Briefly discuss the effects of fire on plants. 3
 - (d) Write a short note on soil profile with a diagram. 3
 - (e) Draw and describe detritus food chain. 1+2
 - (f) Give a schematic diagram of the 'Hydrological Cycle'. 3
 - (g) Define plant succession. Mention different stages of hydrosere and their vegetation. 1+2
 - (h) Compare commensalism and parasitism. 3
 - (i) What is Biodiversity hotspot? Why is it important? 2+1
 - (j) What are the types of ecological pyramid? 3
 - (k) What are the characteristics of tropical rain forests? 3
 - (l) Define endemism. What is meant by continental drift? 1+2

3. Answer any *two* questions from the following: 5×2 = 10
- (a) Describe different steps of Nitrogen Cycle indicating the role of microbes in each step. 5
- (b) Briefly describe different trophic organizations. 5
- (c) Briefly describe the process of ecological speciation. 5
- (d) Discuss briefly, the principles and models of energy flow. 2+3

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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