



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 4th Semester Examination, 2023

CC9-BOTANY

PLANT ECOLOGY AND PHYTOGEOGRAPHY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

GROUP-A

1. Answer any **five** questions: 1×5 = 5
- (a) Define the term 'carrying capacity'.
 - (b) Name one denitrifying bacterium.
 - (c) What do you mean by ecological amplitude?
 - (d) What is growth curve? Give example.
 - (e) What is the full form of GPP and NPP?
 - (f) Who is the father of Phytogeography?
 - (g) What is Permafrost?
 - (h) What is Ecological niche?

GROUP-B

2. Answer any **three** questions: 5×3 = 15
- (a) Discuss the role of climate in soil development. 5
 - (b) Write a note on ecological speciation. 5
 - (c) Differentiate between temperate and tundra biome. 5
 - (d) Illustrate the various stages of xerosere. 5
 - (e) Discuss the factors associated with endemism. 5

GROUP-C

3. Answer any **two** questions: 10×2 = 20
- (a) Elucidate the pyramid of biomass in an ocean ecosystem. Mention the adaptive features in hydrophytes. 6+4
 - (b) Define population density. Explain how intrinsic and extrinsic factors regulate population density. 2+8
 - (c) Write short notes on: 5+5
 - (i) Continental drift
 - (ii) Endemism.
 - (d) What do you mean by capillary water? With labelled diagram explain nitrogen cycle. 2+8

—×—