

## UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 4th Semester Examination, 2022

## CC9-BOTANY

## PLANT ECOLOGY AND PHYTOGEOGRAPHY

Time Allotted: 2 Hours Full Marks: 40 The figures in the margin indicate full marks. **GROUP-A** Answer any *five* questions:  $1 \times 5 = 5$ 1. (a) Define edge effect. 1 (b) What do you mean by homeostasis? 1 (c) Explain with example what do you mean by commensalism. (d) Define productivity. 1 (e) What is plant succession? 1 (f) Define ecological dynamism. (g) What do you mean by speciation? 1 (h) What do you mean by biogeochemical cycle? 1 **GROUP-B** 2.  $5 \times 3 = 15$ Answer any *three* questions: (a) Write a short note on Hydrological cycle. 5 1+4=5(b) Define Symbiosis. Write a short note on chemical and biological component of Soil. (c) Write a short note on Soil Profile. 5 (d) With the help of neat labelled diagram, describe the general process of 5 succession. (e) Write a short note on the "Theories of Endemism". 5 **GROUP-C** 3. Answer any *two* questions:  $10 \times 2 = 20$ (a) What do you mean by climax? With labelled diagram, explain Carbon Cycle. 2+8=1010 (b) Explain with examples, the different phytogeographical divisions of India. (c) Explain the "Theory of Tolerance". Briefly describe various components of 3+7=10Tundra biome. (d) Write short notes on adaptation of plants to:  $2\frac{1}{2} \times 4 = 10$ (i) Light; (ii) Temperature; (iii) Wind; (iv) Water.

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