

**Bankura University**  
**B.Sc 4th Semester (Honours) Examination, 2021**  
**Subject: Botany**

Course ID: 41312

Course Code: SHBOT/402/C-9

Course Title: Plant Ecology & Phytogeography

Full Marks: 25

Time: 1h.15 min

The figures in the margin indicate full marks

Answer all the questions.

**UNIT I**

- 1. Answer any five of the following questions:** (1×5=5)
- a) What is pedogenesis?
  - b) What are obligate parasites?
  - c) What do you mean by micro-consumer?
  - d) Differentiate between natality & mortality.
  - e) Who is referred to as 'Father of Phytogeography'?
  - f) Give two examples of artificial ecosystems.
  - g) What are 'pioneer species'?
  - h) What are 'diazotrophs'?

**UNIT II**

- 2. Answer any two of the following questions:** (5×2=10)
- a) Briefly describe the Phosphorus Cycle. 5
  - b) Write short notes on *any two* of the following: 2.5+2.5=5
    - (i) Population dispersion
    - (ii) Age pyramid
    - (iii) Soil profile
  - c) Schematically represent the Pyramid of Energy. What is 10% rule of energy transfer? 3+2=5
  - d) What do you mean by fundamental and realized niche? How do you differentiate niche from habitat? What is ecotone? 2+2+1=5

**UNIT III**

- 3. Answer any one of the following questions:** (10×1=10)
- a) Differentiate primary and secondary succession. Describe the process of succession in aquatic ecosystem with suitable examples of vegetation. 3+7=10
  - b) What is Continental Drift Theory? Briefly describe each phytogeographical zones of India with examples of plant species of each zone. 2+8=10