Bankura University

B.Sc. 4th Semester (Honours) Examination, 2022 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 right hand side margin indicate marks.

UNIT I

1. Answer *any five* questions from the following: $1 \times 5 = 5$

- (a) What do you mean by acclimation?
- (b) Site one example of mutualism.
- (c) What is secondary succession?
- (d) Distinguish between net primary productivity (NPP) and gross primary productivity (GPP).
- (e) What is 'keystone species'?
- (f) What is canopy cover?
- (g) Name two endemic plant species in India.
- (h) What is soil horizon?

UNIT II

2. Answer *any two* questions from the following:

 $5 \times 2 = 10$

- (a) Write a short note on 'Vegetation of Gangetic plain'.
- (b) Briefly describe the factors responsible for endemism.
- (c) Describe allopatric and sympatric speciation with suitable examples. 2.5+2.5
- (d) Briefly describe the composition and roles of soil micro-organisms.
- 3. Answer *any one* question from the following:

 $10 \times 1 = 10$

- (a) Describe the Y-shaped energy flow model with suitable diagram. What is 10% rule of energy transfer? 8+2=10
- (b) Differentiate population with community. Briefly describe the characteristics of population ecology. 2+8=10