## **Bankura University**

B.Sc. 2<sup>nd</sup> Semester (Honours) Examination, 2022

**Subject: Botany** 

Course ID: 21314 Course Code: SH/BOT/203/GE-2

Course Title: Plant Ecology, Morphology & Taxonomy

Full Marks:25 Time:1Hour 15Minutes

The figures in the right-hand margin indicate marks.

Answer all the questions.

## **UNIT I**

1. Answer *any five* of the following questions:

 $1 \times 5 = 5$ 

- a) What are the basic components of an ecosystem?
- b) What do you mean by sere?
- c) What is biogeochemical cycle?
- d) What is Schimper-Braun series?
- e) What is lodicule?
- f) What is the full form of ICN?
- g) Name the acronym of the Central National Herbarium, Howrah?
- h) Write down the floral formula of the Rubiaceae family?

## **UNIT II**

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

 $5 \times 2 = 10$ 

 a) Briefly describe the theories of endemism. Name one endemic species in India

4+1

b) What is a Taxon? What are the basic criteria of valid publication of a taxon?

1 + 4 = 5

c) What is phyllotaxy? Briefly describe the different types of spiral phyllotaxy?

$$1 + 4 = 5$$

d) Enumerate the diagnostic characteristics of the family Orchidaceae.

## UNIT III

3. Answer *any one* of the following questions:

 $10 \times 1 = 10$ 

a) What is fruit? What are the different parts of a fruit? Describe the different types of dehiscent and indehiscent fruits. 1+1+8=10

b) Describe the different stages of the nitrogen cycle. Mention the importance of the nitrogen cycle? 8+2=10