Bankura University

B.Sc 5th SEMESTER(Honours) EXAMINATION, 2021 Subject: BOTANY

Course ID: 51312 Course Code: SHBOT/501/C-12

Course Title: Plant Physiology

Full Marks: 25 Time: 1 h 15 min

The figures in the margin indicate full marks Answer all the questions.

UNIT-I

1. Answer any five of the following:

 $1\times5=5$

- a) What is active transport?
- b) Mention the function of aquaporin?
- c) Why vernalization is significant?
- d) Write down the full form of 2,4,5-T.
- e) What is soil less culture?
- f) What is phytochrome?
- g) Which anatomical structure is involve in guttation.
- h) Name one important chelating agent.

UNIT-II

2. Answer any two of the following:

 $5 \times 2 = 10$

- a) What is water potential? Mention its components.
- b) Write down the different causes of seed dormancy.
- c) What is photoperiodism? Discuss the role of phytochrome in flowering.
- **d)** Give an account of the various factors which affect rate of transpiration. Name one antitranspirant?

UNIT-III

3. Answer any one of the following:

 $10 \times 1 = 10$

- a) Write down the physiological roles of IAA on cell elongation, phototropism and apical dominance. What is statolith?
- b) Enumerate the important physiological role of one macro and one microelement. Write down in brief, the mechanism of ion uptake in vascular plants.