

2019

( 5th Semester )

Time :  $2\frac{1}{2}$  hours

Full Marks : 60

Answer from **both** the Sections as per direction*The figures in the right-hand margin indicate marks**Candidates are required to answer in their own words  
as far as practicable***( PLANT PHYSIOLOGY )**

## SECTION – A

1. Answer the following : 2 × 6

- (a) Symplastic movement
- (b) Chelating agents
- (c) Antiport

- (d) Phloem unloading
- (e) Seed dormancy
- (f) Name four cytochromes.

## SECTION – B

Answer **all** questions : 12 × 4

2. What is transpiration ? Discuss the mechanism and factors affecting transpiration. 12

*Or*Write notes on : 6 × 2

- (i) Cohesion-tension theory
- (ii) Water potential.

3. What are micronutrients ? Give a detail account of essential micronutrient and deficiency symptoms. 12

*Or*Write notes on : 6 × 2

- (i) Electrochemical gradients
- (ii) Proton ATPase pumps.

( Turn Over )

4. Give the experimental evidence in support of phloem as the site of sugar translocation. 12

*Or*

Write notes on : 6 × 2

- (i) Physiological role of cytokinin
  - (ii) Chemical Nature of Ethylene.
5. What is flowering stimulus ? Describe the *synthesis and role of florigen for flowering of short day plants.* 12

*Or*

Write notes on : 6 × 2

- (i) Photomorphogenesis
  - (ii) High irradiance responses (HIR).
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