

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc.(Agriculture) (Sem.-3)

PLANT PHYSIOLOGY

Subject Code : BSAG-302

M.Code : 72552

Date of Examination : 19-12-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.**

SECTION-A

1. Write short notes on :

- a) Name the phenomenon which describes that apical bud inhibits the growth of lateral buds.
- b) Differentiate between scarification and stratification.
- c) What is the tissue involved in sugar translocation in plants?
- d) What is the climacteric rise in rate of respiration?
- e) Define photo phosphorylation.
- f) What is Red drop and Emerson's effect.
- g) Differentiate between macro and tracer element.
- h) What are anti-transplants? Give two examples.
- i) Define water use efficiency.
- j) What is critical photo period?

SECTION-B

2. Outline the various steps of Glycolysis.
3. What is the path of translocation of organic solutes in higher plants? Explain the mechanism of translocation of solutes.
4. Define vernalization and mention its significance.
6. Explain the methods to break seed dormancy.
6. Discuss the role of cytokinins in leaf senescence.

SECTION-C

7. Describe the role of plant physiology in agriculture with suitable examples.
8. What are the essential minerals required by plants? Explain the role of nitrogen and iron in plant nutrition.
9. Describe the mechanism of CO₂ fixation in CAM plants.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.