

-Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. Agriculture (Sem.-2)
FUNDAMENTALS OF CROP PHYSIOLOGY

Subject Code : BSAG-204-19

M.Code : 77665

Date of Examination : 09-07-22

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) Red drop effect
- b) Significance of transpiration
- c) Enzyme complex for fatty acid synthesis
- d) Oxidative phosphorylation
- e) Physiological roles of nitrogen
- f) Diffusion and Osmosis
- g) Anion respiration
- h) Structure of plastid
- i) Stress hormone
- j) Net assimilation rate

SECTION-B

2. Explain the role of potassium in stomatal physiology.
3. Describe the importance of physiological growth parameters in crop productivity.
4. Schematically represent the reactions and enzymes involved in Krebs' cycle. Give reason why it is called as amphibolic pathway?
5. What is the site for fatty acid breakdown in a plant cell? Discuss β -oxidation for fatty acid breakdown.
6. Define crop physiology. Explain why course on crop physiology is included in curriculum of agriculture students?

SECTION-C

7. Define photophosphorylation. Outline the Z-scheme or non-cyclic photophosphorylation and differentiate it from cyclic photophosphorylation.
8. Give a detailed account of physiological roles and agricultural applications of gibberellins.
9. Give an account of the mechanism of absorption of mineral salts by the 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.