

-Roll No.

Total No. of Pages : 02

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B.Sc. Agriculture (Sem.-2)

FUNDAMENTALS OF CROP PHYSIOLOGY

Subject Code : BSAG-204-19

M.Code : 77665

Date of Examination : 20-12-22

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) Deficiency symptoms of Nitrogen
 - b) Osmotic potential, hypotonic and hypertonic solutions
 - c) Oxidative phosphorylation
 - d) Growth curves
 - e) Environmental requirements for paddy crop in Punjab.
 - f) Water absorption in saline soils
 - g) CAM plants
 - h) Water logged soils are physiologically dry soils
 - i) Importance of crop physiology in agriculture
 - j) Advantages of transpiration.

SECTION-B

2. Discuss the role of Gibberellins in plants
3. Discuss Light reactions with the help of well labeled diagram.
4. Discuss B-oxidation of Fatty acids.
5. Discuss the Structure and Functions of Chloroplast.
6. Discuss the Physiological factors that influence the crop productivity.

SECTION-C

7. Describe the reactions of Krebs cycle and number of ATP generated in this process.
8. What is the Role of mineral nutrients and their uptake in plants?
9. Discuss the Mechanism of opening and closing of stomata.

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.