

Roll No.: .....

**SGT UNIVERSITY****END TERM THEORY EXAMINATION JULY - 2022**

Faculty/College of Study:	Agricultural Sciences	Year/Semester:	2 <sup>nd</sup> Semester
Program:	B.Sc. (Hons.) Agriculture	Duration:	02:00 Hrs.
Course/Subject:	Fundamentals of Crop Physiology	Maximum Marks:	40
Course/Subject Code:	17010212 11010204	Batch:	2018 2019

**Instructions: -**

1. Write Your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided correct question paper. Complaint(s) in this regard, if any should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. All Questions are compulsory. Marks are indicated against each question.
4. Illustrate your answer with diagram wherever required.

**SECTION-A****(Very Short Answer Type Questions)****Note: All Questions are compulsory: -****[12X1=12]**

S. No.	Question	Marks Allotted
1	Give two examples of C <sub>3</sub> plants.	1
2	Define crop physiology.	1
3	In the rainy season, doors get swelled up due to _____	1
4	In C <sub>3</sub> and C <sub>4</sub> plants, primary carboxylation takes place with the help of _____	1
5	Transpiration take place through _____	1
6	What do you mean by antitranspirants?	1
7	Absorption of water takes place through which conductive tissue?	1
8	In C <sub>4</sub> plant first CO <sub>2</sub> acceptor is _____	1
9	Give four examples of plant growth regulators.	1
10	Glycolysis take place in _____	1
11	Which hormone is known as stress hormone?	1
12	Name the only gaseous natural plant growth regulator.	1

**SECTION-B**  
**(Short Answer Type Questions)**

**Note: All Questions are compulsory: -**

**[4X2=8]**

S. No.	Question	Marks Allotted
13	Define osmosis and also give an example.	2
14	Briefly explain the process of diffusion.	2
15	What do you mean by transpiration?	2
16	Draw the structure of chloroplast.	2

**SECTION-C**  
**(Descriptive Answer Type Questions)**

**Note: Attempt Any Two (02) Questions: -**

**[2X4=8]**

S. No.	Question	Marks Allotted
17	Define photosynthesis along with its equation and which colour of light is most efficient in photosynthesis and why?	4
18	Define transpiration. Briefly explain types of transpiration in plants.	4
19	Differentiate between macro and micro nutrients of plants. Write the characteristic deficiency symptom of Iron, Calcium, Nitrogen, and Phosphorus.	4

**SECTION-D**  
**(Long Answer Type Questions)**

**Note: Attempt Any Two (02) Questions: -**

**[2X6=12]**

<b>S. No.</b>	<b>Question</b>	<b>Marks Allotted</b>
20	Differentiate between C <sub>3</sub> and C <sub>4</sub> plants.	6
21	Differentiate between Respiration and Photosynthesis.	6
22	Explain the mechanism of C <sub>3</sub> cycle in plants.	6