

Roll No.

(H)

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COER University

END SEMESTER EXAMINATION, EVEN SEM 2022-23

Time : 3 hours
Program Name : B.Sc.(Hons.) Agriculture
Course Name : Fundamentals of Crop Physiology

Total Marks : 100
Semester : II
Course Code : BSAG204

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the time.

Q. No 1	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	What is Crop Physiology? Write down the importance of Crop Physiology in agriculture in Detail?	CO 1	1
(b)	Explain the Mechanism of absorption of water in plants?	CO 1	1
(c)	Discuss the term Field Capacity, Water holding Capacity and Permanent wilting Percentage?	CO 1	1
(d)	Classify the mineral nutrient of the plant on the basis of requirement, Function and mobility?	CO 1	2
(e)	Write short notes on: mitochondria, Golgi bodies, endoplasmic reticulum.	CO 1	2
(f)	Write briefly about the structure & function of cell wall.	CO 1	2

Q. No 2	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Differentiate between C3 and C4 plants?	CO 2	4
(b)	Give an account of the factor affecting the rate of transpiration?	CO 2	3
(c)	Explain Krebs cycle in detail?	CO 2	2
(d)	Define transpiration & its types.	CO 2	2
(e)	Draw the well labelled diagram of stomatal structure.	CO 2	2
(f)	Discuss the mechanism of opening & closing of stomata.	CO 2	3

Q. No 3	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Analyze the impact of environmental factors on crop growth and development, and how these factors can be managed to enhance productivity.	CO 3	4
(b)	Develop a comprehensive understanding of the physiological processes that govern the growth and development of major crops.	CO 3	4
(c)	Apply your knowledge of crop physiology to optimize crop yield and quality.	CO 3	4
(d)	Differentiate between light & dark reactions.	CO 3	4
(e)	How you separate photosynthetic pigments by paper chromatography?	CO 3	3
(f)	What will you do for measurement of the distribution of stomata	CO 3	1

Q. No 4	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Write the deficiency symptoms of Calcium, magnesium, Potassium Nitrogen?	CO 4	2
(b)	What are growth promoters and growth Inhibitors?	CO 4	1
(c)	What are CAM plants? also, explain KRANZ anatomy?	4	1
(d)	Write short note on root initiation and dormancy.	CO 4	2
(e)	What are the different role of Gibberellins.	CO 4	1
(f)	Distinguish between photoperiodism and phototropism.	CO 4	4

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