

**KERALA AGRICULTURAL UNIVERSITY**

B.Sc (Hons.) Ag. Degree Programme 2014 Admission

IV<sup>th</sup> Semester Final Examination-July 2016

Cat. No: Crps 2201

Title: Crop Physiology (2+1)

Marks: 50.00

Time: 2 hrs

**I Fill up the blanks**

(10 x 1 =10)

1. The element which is easily available under alkaline pH \_\_\_\_\_
2. \_\_\_\_\_ is the first stable product of the dark reaction of photosynthesis in C3 plants.
3. The organelle concerned with oxidative phosphorylation \_\_\_\_\_
4. \_\_\_\_\_ is the source of O<sub>2</sub> during photosynthesis.
5. \_\_\_\_\_ is the latent heat of vaporization of water.
6. Translocated form of photosynthesis in plants is \_\_\_\_\_
7. The present day CO<sub>2</sub> concentration in the atmosphere is \_\_\_\_\_
8. An example for cultivated CAM plant is \_\_\_\_\_
9. \_\_\_\_\_ is the instrument used for measuring transpiration rate.
10. The hormone which induces seed dormancy \_\_\_\_\_

**II Write short notes ANY FIVE**

(5 x 2 =10)

1. Differentiate C3 & C4 plants.
2. Photosynthetic pigments.
3. Antitranspirants.
4. Differentiate absorption spectrum and active spectrum.
5. I.S.T.A standards of seed storage.
6. Structure and function of chloroplast
7. Vernalization.

**III. Explain ANY FIVE of the following**

(5 x 4 =20)

1. Describe the photoperiodic classification of plants.
2. Changes associated with fruit ripening. Discuss the methods to delay ripening.
3. Alternate respiration.
4. Hydroponics and its significance.
5. Mechanism of abscission and its significance.
6. Biosynthesis of GA.
7. Photophosphorylation.

**IV. Write essay on ANY ONE**

(1 x 10=10)

1. Write a note on the commercial application of plant growth regulators.
2. Discuss the classification of nutrients based on physiological functions and mention the associated function of each nutrient.

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