KERALA AGRICULTURAL UNIVERSITY
B.Sc.(Hons.) Ag.
One-Time Re-examination- April -2018
2014 Admission VII Semester
Crop Physiology (2+1)

I
Fill in the blanks
1 The hormone associated with fruit ripening
2 The element which is more available under alkaline pH
3 The chemical which is used to test seed viability
4 An example for a cultivated CAM plant
5 The soil water potential at field capacity is
6 Khaira disease in paddy is due to the deficiency of
7 First formed compound in C₃ cycle is
8 Respiratory quotient of fat rich seed is
9 SI unit of water potential
10 Final electron acceptor of METC is

(10x1=10)

II
Write Short notes on ANY FIVE of the following
1 Properties of water in relation to physiology of plants
2 Root pressure theory of ascent of sap
3 Criteria of essentiality of plant nutrients
4 Water use efficiency
5 Alternate respiration
6 Senescence
7 Anti-transpirants

(5x2=10)

III
Answer ANY FIVE of the following
1 Explain the mechanism of stomatal opening
2 Describe the glycolysis pathway with the enzymes involved
3 Explain the physiological changes during seed germination
4 Cyclic and non-cyclic photophosphorylation
5 Explain the biosynthesis of ethylene and the approaches to delay ripening
6 What is photoperiodism? How can we classify plants based on photoperiodic response?
7 Explain photorespiration in plants and mention its significance

(5x4=20)

IV
Write an essay on ANY ONE of the following
1 What is seed dormancy? Explain different types and the methods to overcome dormancy
2 Explain the commercial applications of plant growth regulators

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