

## KERALA AGRICULTURAL UNIVERSITY

## B. Sc. (Hons.) Ag 2017 Admission II Semester Final Examination-July-2018

rps.1201

## Fundamentals of Crop Physiology (2+1)

I	1	Fill in the blanks: is an auxin which controls broad leaf weeds.	Marks: 50 Time: 2 hours (10x1=10)
	2	Fruit cracking is due to nutrient deficiency	
	3	Kaolin is a type of anti-transpirant	
	4	Root pressure theory was proposed by	
	5	and are two new generation PGRs.	
		Choose the correct answer	
	6	The semi-autonomous organelles are	
		a Ribosome & ER c Oleosomes	
		b Chloroplast & Mitochondria d All the above	
	7	The attraction between the water molecules is due to	
		a Adhesion b Cohesion c Both d	None
	8.	Plasma membrane is	e de la companya de
		a Permeable b Not permeable c Selectively permeable	d All
		State True or False	
	9	Potamogeton is a functionless stomatal type	
	10	Mn and Mo involves in photolysis of water	
11		Write Short notes on ANY FIVE of the following	(5x2=10)
	1	Water potential and its components	
	2	Phytochrome in plants	
	3	Significance of transpiration in plants	
	4	Sketch the 'Z Scheme' of light reaction of photosynthesis	• •
	5	Richmond-Lang effect	
`	6	Anti-transpirants	
	7	Phloem loading and unloading	
Ш		Answer ANY FIVE of the following	(5x4=20)
	1	Physiological roles of auxin in plants	
	2	Drought resistance mechanisms in plants	
	3	Write in brief: Criteria of essentiality of nutrients and mechanism of water	r absorption

- 4 Differentiate: Oxidative phosphorylation and photophosphorylation
- 5 Role of GA in seed germination with diagram
- 6 Write short notes on
  - a Photoperiodism
  - b Photorespiration
- 7 Write short notes on
  - a Red drop and Emerson's enhancement effect
  - b Senescence and Abscission

## IV Write an essay on ANY ONE of the following

(1x10=

- Practical utility of plant growth regulators in Agriculture and Horticulture
- <sup>2</sup> Give detailed account on C4 pathway of carbon fixation with flow chart

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