

KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Agriculture 2013 Admission

7th Semester One Time Re-Examination-January-2017

Cat. No: Agro. 1203

Title: Irrigation & Water Management (2+1)

Marks: 50.00

Time: 2 hours

I Fill up the blanks

(10x1=10)

1. Area irrigated by one cusec flow of water is called
2. Research station under KAU whose mandate is water management on crops is
3. One cusec flowing water is equal to m³ per second
4. The vertical interval in time between water front advance and recession is called
5. At field capacity, soil moisture is held at a PF of
6. At permanent wilting point, soil moisture tension is at Atmosphere.
7. One hectare cm of water is equal to m³
8. Per cent of water is required for physiological functions of the plant.
9. When soil dry weight is 20g, wet weight is 25g, bulk density 1.5g Km³, the available water holding capacity at 1m soil depth is cm
10. In EI₃₀ Index, I₃₀ stands for

II Write short notes on any FIVE of the following

(5x2=10)

1. Land capability classification
2. Forms of water erosion
3. IW/CPE ratio
4. Causes of water logging
5. Drum culture technique
6. Drip irrigation
7. Fertigation

III Short Essays (Any FIVE)

(5x4=20)

1. Water requirement of crops, components of WR and list out the factors affecting WR.
2. Mention the critical stages of irrigation for rice, and discuss briefly the different irrigation practices for improving water productivity of rice
3. Discuss tensiometric method for estimating soil moisture with a neat diagram.
4. Approaches in watershed management.