



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

gro.1203

Irrigation and Water Management (1+1)

Marks: 50
Time: 2 hours
(10x1=10)

I Fill in the blanks:

- 1 Direct estimates of evapotranspiration is done by.....
- 2 Total net irrigated area of Kerala state is.....
- 3 Porometer is used to measure
- 4 Hygroscopic water is held with a tension ofatmosphere
- 5 In India, state has more area under micro irrigation.

Match the following

A		B	
6	Wheat	a	Deep rooted
7	Rice	b	Indicator plant
8	Cotton	c	2500 mm
9	Banana	d	450mm
10	Sunflower	e	Shallow root

II Write Short notes on ANY FIVE of the following

(5x2=10)

- 1 What is meant by irrigation efficiency and water application efficiency?
- 2 Write short notes on Kc value
- 3 List out the types of sprinkler head
- 4 What is crop water requirement?
- 5 What are the criteria for selection of irrigation methods
- 6 Distinguish between gross irrigation requirement and net irrigation requirement
- 7 Wheat crop requires 45 cm of irrigation water during crop season of 125 days. How much area can be irrigated with a flow of 18 litres per second for 10 hours each day?

III Answer ANY FIVE of the following

(5x4=20)

- 1 Discuss the importance of irrigation water management
- 2 Explain about the moisture extraction pattern by plant
- 3 How is different soil properties influenced root development
- 4 Briefly explain the component of drip irrigation
- 5 Describe the importance and types of drainage
- 6 Difference between ETp and ETo
- 7 Explain the agronomic practices for the use of poor quality water for irrigation

IV Write an essay on ANY ONE of the following

(1x10=10)

- 1 What is irrigation scheduling? Explain different approaches of irrigation scheduling
- 2 Discuss about the different methods of irrigation with neat sketch. Enumerate the merit and demerit of different irrigation method.
