

KERALA AGRICULTURAL UNIVERSITY

B.Sc. Hons (Ag) 2011 Admission

IInd Semester Final Examination, August 2012

Cat. No: Agro.1203

Title: Irrigation and water management

Marks: 80

Time: 3hours

I Fill up the blanks

(10 x 1=10)

1. According to the land capability classification, arable lands fall in the category of classto.....
2. The most critical stage for irrigation in wheat isstage.
3. For undulated topography the most appropriate method of irrigation is.....
4. The unit of measurement of soil moisture by tensiometer is.....
5. Moisture retention capacity is more insoil.
6. The best method of irrigation for rice fields is.....
7. Water available to plants to the maximum extent is the one held between FC and.....
8. Major loss of water in the rice field is due to.....
9. Materials used to minimize evaporation from soil surface are called
10. Cultivation of crops in areas where rain fall is less than 750 mm per annum is called.....

II Write short notes /answers on ANY TEN

(10 x 3=30)

1. Potential evapotranspiration.
2. Critical stages of crops.
3. Available water.
4. Hysteresis effect.
5. Typical moisture characteristic curve.
6. Theories of water availability.
7. Scheduling of irrigation.
8. Irrigation requirements.
9. Check basin irrigation.
10. Vertical mulch.
11. Importance of capillary water to plants.
12. Farm pond.

III Write short essays on Any SIX of the following

(6 x 5=30)

1. *Ex situ* water harvesting methods.
2. Role of grasses and pastures in soil conservation.
3. Drainage and its usage in agriculture.
4. Agronomic techniques to increase WUE.
5. Quality of irrigation water and its suitability for crops.
6. Alternate land use systems in rainfed areas.
7. Drip irrigation in agriculture.
8. Types of soil erosion, different ways and means to check erosions.

IV Write an essay on Any ONE

(1 x10=10)

1. Land capability classification and its utility.
2. Watershed management, its concepts, basic components and limitations.
