

Suppl' Exa 2008/S2

KERALA AGRICULTURAL UNIVERSITY
B.Sc.(Hons.) Agriculture – 2008 Admission - IInd Semester
Supplementary Examination – March 2010

Cat. No. : Agro 1203

Max. marks: 80

Title : Irrigation and Water Management (2+1)

Time : 3 hours

I. a. Fill up the blanks

(10 x 1 = 10)

1. Ultimate gross irrigation potential of India _____ m.ha
2. Soil moisture tension for a given soil moisture content is _____ for clay than that for sandy soil.
3. Crop coefficient is denoted by _____
4. Water requirement for rice crop is _____
5. Operating pressure required for sprinkler is _____ than that for drip.

b. State True or False

6. Irrigation efficiency of irrigation projects in India is 10 - 20 per cent
7. Aggregate index of soil irrigability class B is 2-1
8. Water use efficiency of C₃ plants is lower than that of C₄ plants
9. Compartmental bunding is *ex-situ* water harvesting method
10. RSC of irrigation water 1.20 me/L, is suitable for irrigation

II. Write Short notes on ANY TEN

(10 x 3 = 30)

1. Air porosity
2. Dry farming
3. Hygroscopic water
4. Mention dynamics of field water
5. Effective rainfall
6. Surge irrigation
7. Conjunctive use of water
8. Strip cropping
9. Puertorican terrace
10. Mention *in-situ* water harvesting methods
11. Alternate land use system
12. NWDPR

III. Write short essays on ANY SIX of the following

(6 x 5 = 30)

1. Saturated and unsaturated flow of water in the soil
2. Factors affecting crop water requirement
3. Basin method of irrigation

4. Irrigation scheduling for sugarcane
5. Parameters for assessment of water quality
6. Agronomic management practices for soil conservation
7. Characteristics of watershed
8. Command area development - discuss briefly

IV. Write essays on ANY ONE

(1 x 10 = 10)

1. Drip irrigation for coconut
2. Discuss soil erosion and its management