

KERALA AGRICULTURAL UNIVERSITY

B.Sc Hons (Ag) 2010 Admission

VIth Semester Final Examination- July /August -2013

Cat. No: Agro.3209

Title: Sustainable Agriculture & organic Farming (1+1)

Marks: 80

Time: 3 hours

I. State True or False for the following

(10 x 1.0 = 10.0)

1. In sequence cropping there is no inter crop competition
2. In inter cropping; crop intensification is in time dimensions.
3. Multi tier cropping is mostly practiced in plantation crops
4. Organic farming reduces the Bulk density and increases compactness
5. Biogas systems supply both energy and fertilizer
6. Coconut + Cocoa + Pepper + Pineapple is a good example of sequence cropping system
7. INM, IWM and IPM are the components of organic farming
8. Better utilization of farm resources is achieved with monoculture
9. Ecological balance can be achieved through modern agriculture
10. Mexican beetle is used as bio agent for control of parthenium

II. Write short notes (Any ten)

(10 x 3.0 = 30.0)

1. Differentiate additive and replacement series of intercropping
2. Differentiate conventional and modern agriculture
3. Differentiate green leaf manuring (*ex-situ*) and green manuring (*in-situ*)
4. Explain in brief the negative impact of green revolution in India
5. Differentiate LEIA v/s HEIA
6. Crop residue management for eco-friendly agriculture
7. Define watershed and mention soil and water conservation measures for hilly areas
8. Enumerate any six ITKs practiced by the farmers
9. Define crop rotation and mention basic principles of crop rotation
10. Define tillage and mention the advantages of conservation tillage
11. Define supplemental fertilization, bio rational pesticides and foliar fertilization
12. Define accreditation and mention the steps involved in organic farming certification

III. Write short essay's (Any Six)

(6.0 x 5.0 = 30.0)

1. Define alternate agriculture and mention different alternate agricultural systems with their limitations
2. Mention the factors affecting ecological balance and suggest suitable measures for correction
3. Define FYM and explain two important advanced methods of composting
4. Current status of organic farming in India
5. Biological control of pests, diseases and weeds in organic farming
6. Define sustainable agriculture and explain sustainable yield index
7. Define organic farming and mention permitted, restricted and prohibited inputs in organic farming
8. Mention the pre requisites for successful intercropping and list advantages and disadvantages of inter cropping

IV. Write essay on any one of the following

(10.0 x 1.0 = 10.0)

1. Natural resource management for sustainable agriculture in India
2. Organic farming v/s Food security