

B.E (AGRICULTURAL AND IRRIGATION ENGINEERING)
DEGREE END SEMESTER EXAMINATIONS, NOV 2011
III SEMESTER

24

AI 9203 PRINCIPLES OF CROP PRODUCTION
(REGULATIONS 2008)

Time: 3 hrs

Total Marks: 100

Part A (10 x 2 = 20)

Answer All Questions

1. Explain the term crop production and its sub- sectors.
2. Write briefly about symbiosis.
3. Differentiate the terms soil fertility and soil productivity.
4. Write briefly about universal soil loss equation.
5. Differentiate the terms strip tillage and ridge tillage.
6. Explain the term integrated nutrient management.
7. List down the **ideal conditions for rice cultivation**.
8. What should be applied for the pod development and at what rate?
9. Explain preparation and planting of cuttings in tea cultivation.
10. What are the major divisions of horticulture?

Part B (5 x 16 = 80)
(Question 11 is compulsory)

- 11(a) Explain in detail the factors affecting the crop growth. (9)
 (b) Write the role of the plant nutrients and deficiency symptoms for any 3 nutrients. (7)

- 12(a)(i) List down all the essential elements required for crop growth and the criteria for an element. (7)
 (ii) Explain in detail the factors affecting the land degradation. (4)
 (iii) Define erosivity and erodibility. (5)

Or

- 12(b)(i) What are the causes of erosion? Explain the factors affecting erosion. (7)
 (ii) Discuss in detail the soil moisture constants. (9).

- 13(a)(i) List out the objectives of tillage and explain the different tillage practices. (16)

Or

- 13(b)(i) Classify and discuss in detail about fertilizers with examples. (8)
 (ii) Explain the different methods of weed control. What is integrated weed management? (8)

- 14(a) Explain the general cultivation practices followed for rice. (16)

Or

- 14(b) Explain in detail the cultivation and management of green manure crops. (16)

- 15(a) Discuss about the cultivation practices for any fruit. (16)

Or

- 15(b) Describe the cultivation of mushrooms and organic cultivation process for vegetables. (16)