

Question Paper Code : 6066

M.Sc. (Ag.) (Semester-I) Examination, 2017

AGRONOMY

[First Paper]

(Modern Concepts in Crop Production)

Time : Three Hours]

[Maximum Marks : 50

Note : Answer **five** questions in **all**, including Question **No. 1** which is **compulsory**. Attempt **one** question from each unit.

1. Describe briefly of the following : [2x10=20]

- (a) Adaptation and mitigation of climate change
- (b) Carbon rating
- (c) Abiotic stress
- (d) Conservation agriculture
- (e) Protective cultivation
- (f) Precision farming

- (g) Site specific nutrient management
- (h) Economic optimum dose
- (i) Organic farming
- (j) Farming system

UNIT-I

2. Describe Agro-ecological zone of India with their importance. [8]
3. How can we mitigate the effect of climate change on crop productivity and soil health ? [8]

UNIT-II

4. Define mulch, its types and importance in soil and water conservation. [8]
5. Write short notes on of the following : [8]
 - (a) Soil fertility and soil productivity
 - (b) Zero tillage and minimum tillage
 - (c) Plant population and plant geometry

UNIT-III

6. What are biotic and abiotic stresses ? Describe the mitigation measure to these stresses through integrated approaches. [7]
7. Write short notes on the following : [7]
 - (a) Concept of ideal plant type
 - (b) Crop response production function

UNIT-IV

8. What is farming system research ? How it is helpful in sustaining agriculture production ? [7]
9. What are crop growth and yield contributing parameters of the following : [7]
 - (a) Rice
 - (b) Wheat

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