

CSM : 16

AGRICULTURE

PAPER - I

Time Allowed : 3 hours

Full Marks : 100

Marks for each question is indicated against it.

Attempt any 5 (five) questions taking not more than 3 (three) questions from each Part.

PART - A

1. What is global warming? Agriculture contributes to both global warming and climate change mitigation-justify the statement. Enumerate principal air pollutants emitted from various sources. Give an account of climate resilient agriculture in your own words. **(2+8+5+5=20)**
2. Explain the concept of remote sensing and its possible uses in Indian agriculture scenario with suitable examples. **(20)**
3. Differentiate the following: **(4×5=20)**
 - (a) Organic farming and Natural farming
 - (b) Marginal value product and Marginal return
 - (c) Market information and Market intelligence
 - (d) Communication and Diffusion
4. Describe the mechanical, chemical and biological methods of weed control in reference to the North-East India. **(20)**

PART - B

5. Write short notes on any four of the following **(4×5=20)**
 - (a) Soil acidity
 - (b) Cation Exchange Capacity
 - (c) 1:1 type minerals in Silicate clays
 - (d) Vertisols
 - (e) Conservation Agriculture

6. Enumerate components of integrated nutrient management for organic farming for a typical farm of Mizoram. Give an account of scope and practices of organic farming in Mizoram. Write a note on soil health card. Describe various ways and means of enhancing nutrient use efficiency in rice. **(2+8+2+8=20)**
7. Define agroforestry. Describe role of agroforestry in sustainable hill farming. How do the indigenous people of north-east India obtain their livelihood from forest products? Give an account of need and practices for conserving forest fauna and flora. **(2+5+5+8=20)**
8. What do you mean by problematic soil? What are the different types of problematic soil? Briefly explain the reclamation measures of acidic soil. **(20)**

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