

AGRICULTURE (Paper I)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

The number of marks carried by a question/part is indicated against it.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Write short notes on any three of the following in about 200 words each:

20×3=60

 - (a) Tillage
 - (b) Herbicide Residue Management
 - (c) Seed Dormancy
 - (d) Mulching and Cover Crops
2. Name the essential elements required by plants. What are the sources of these elements? How are they lost from the soil and what are the measures to maintain their status in the soil?

60
3. Differentiate between the following terms:

10×6=60

 - (a) Cropping Scheme and Cropping Pattern
 - (b) Soil Texture and Soil Structure
 - (c) Field Capacity and Water-holding Capacity
 - (d) Water Requirement and Irrigation Requirement
 - (e) Water-use Efficiency and Irrigation Efficiency
 - (f) Organic Matter and Mineral Matter
4. What do you understand by sustainable agriculture? Compare it with intensive agriculture and discuss in detail the management practices in sustainable agriculture.

60

SECTION 'B'

5. Write short notes on any three of the following in about 200 words each:

20×3=60

 - (a) Scheduling Irrigation
 - (b) Training for Human Resource Development
 - (c) Krishi Vigyan Kendras (KVKs)
 - (d) Soil Fertility and Soil Productivity

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| 6. | Discuss the prospects and problems of contract farming. What Government interventions are required for success of contract farming in India? | 60 |
| 7. | Discuss saline and alkaline soils under the following subheads: [60] | |
| (a) | Classification and characteristics | 20 |
| (b) | Causes of formation | 20 |
| (c) | Remedial measures | 20 |
| 8. | What is micro-irrigation and what are its advantages compared to conventional methods of irrigation? Describe the important micro-irrigation systems with respect to their pros and cons, the precautions in their use and the cropping situations. | 60 |