

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) Organic farming
 - (b) Soil structure and steps for development
 - (c) Cropping and farming system
 - (d) Weed control in wheat
2. Describe the principles and limitations of dryland farming. Suggest suitable technologies based on watershed management to enhance crop production under such conditions. **60**
3. How does the nitrogen become available to plants when urea is applied to soil? Briefly write on nitrogen use efficiency under submerged paddy conditions. **60**
4. Write in tabular form seed rate, sowing time, fertilizer schedule, irrigation management and average yield of barley, cotton, lentil, sugarcane, oat and toria crops for higher production. **60**

SECTION 'B'

5. Write short notes on any three of the following in about 200 words each: **20×3=60**
- (a) Accelerated erosion
 - (b) Scheduling irrigation
 - (c) Production function
 - (d) Extension-teaching methods
6. What is sustainable agriculture? Give its limitations and strategies to achieve food security for the 21st century. **60**
7. Discuss farm planning with the principal characteristics of a good farm plan. How is it helpful in farm operation to Indian farmers? **60**
8. Describe the role of co-operative marketing to Indian farmers. Give its main functions and the reasons of slow progress in India. **60**