

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 in about 200 words each on any three of the following: [60]
 - (a) Conservation of natural resources 15
 - (b) Minimum tillage concept 15
 - (c) Multipurpose tree species (MPTs) 15
 - (d) Biological control of weeds 15
2. Give at least two names each of important pulses and oilseed crops grown in Kharif (autumn) and Rabi (winter) seasons. Discuss the constraints holding back production of pulses and oilseeds in India. Suggest measures to increase their production. 60
3. Classify herbicides used for weed control with examples. Discuss the advantages and limitations of using herbicides in crop production. What precautions should be taken during their application? 60
4. How does soil productivity differ from soil fertility? What are the factors responsible for degradation of soil productivity? Suggest practical measures to improve it. 60

SECTION 'B'

5. Write short notes on any three of the following in about 200 words each: [60]
 - (a) Watershed management 15
 - (b) Quality of irrigation water 15
 - (c) Principle of limited capital and opportunity cost 15
 - (d) Mechanization in agriculture 15
6. What are the main causes of low crop production and profit per unit area in India? Discuss specific measures by which the objective of maximization of crop production and profit can be achieved. 60
7. What do you mean by water and wind erosion? Write the mechanism and factors affecting them. Suggest measures for soil and water conservation. 60
8. Describe the importance and role of agricultural extension in the context of small and marginal farmers. Discuss the limitations in effective transfer of technology to the farmers in India. 60